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Williston Basin Oil Development Power Load Forecast Study

Prepared for:

Basin Electric Power Cooperative

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EXECUTIVE SUMMARY

Basin Electric Power Cooperative (“Basin Electric”) engaged Pace Global Energy Services, LLC (“Pace Global”) to perform an analysis of oil development activities in the Williston Basin and the implications these activities may hold for power demand to be served by Basin Electric and its members. The purpose of this analysis is to bound the probable magnitude and timing of future power loads (peak load and annual energy requirements) associated with oil and gas exploration and production activities for use in Basin Electric’s resource planning activities.¹

OVERVIEW

The Williston Basin has been a target for oil development for decades. Much of the current production and development activity is directed at oil-bearing geological structures whose properties, behavior and oil recovery potential is fairly well understood. There is an unusually high degree of uncertainty, however, associated with the oil and gas production potential with respect to the Bakken shale formation which has achieved national recognition through intermittent press and technical reports over the past few years. One controversial theory about the Bakken formation had as its primary conclusion that some 200 billion bbl of high-quality crude oil could be recoverable.² The study yielding these results, authored by the late organic chemist Dr. Leigh Price, is now being evaluated by the U.S. Geological Survey, which will not issue its opinion until early 2008, as the government geologists scratch their heads over independent estimates of original oil in place (OOIP) ranging from 3 billion bbl to over 500 billion bbl, with recovery factors ranging from 3% to as high as 50%.

Composed of several layers of thin shales, the Bakken formation was thought commercially irrelevant until the recent development of highly accurate horizontal well drilling systems. This technology allows the operator to extend the well bore exposed to oil-bearing rock from the vertical thickness of the shale stratum to perforations along up to two miles of horizontal well casing within a single stratum. This technology, along with higher oil prices and an improved understanding of rock characteristics based on the work of Dr. Price and other investigators, has made Bakken Formation oil potentially commercial.

Meanwhile, driven both generally by higher oil and gas prices and specifically by commercial drilling success since 2000 in the Elm Coulee Field in Montana, Williston Basin mineral leasing, drilling and infrastructure development activity has grown rapidly over the past few years, and

¹ This report and the information and statements herein are based in whole or in part on information obtained from various sources as of May 20, 2007.

² For comparison, total U.S. proved oil reserves stood at 22 billion bbl, while Saudi Arabian proved reserves are estimated at just over 260 billion bbl. Source: USDOE Energy Information Administration.

oil production volumes have risen steadily in response. This success has fed a speculative boom in oil development and all the equipment, services and skilled labor associated with oil development.

But Pace Global, after interviewing 17 active developers in the Williston Basin, found that some of the long-term drilling plans are uncertain. The Bakken formation is clearly not homogeneous. In some areas, current technology and best practices can deliver commercially successful wells at current oil prices. Other areas once thought highly prospective have proved disappointing. As a result of both local and world demand, the cost of everything from skilled labor to drill pipe has escalated by 50% or more. Rental rates for drilling rigs have more than doubled. The resulting increase in development costs has already rendered some Williston Basin acreage uneconomic. The land rush for mineral rights has crested. Recent prices range from over \$1,100 per acre to \$1 per acre, depending on location, with developers selectively pruning and filling in acreage positions based on drilling results, and speculators unloading their positions in a generally bearish market.

Along with a great deal of information, two major themes emerged from producer interviews: the significant role of serendipity in some of the recent reported success stories, and an air of collective uncertainty over how the Bakken play and their respective drilling plans would unfold in the coming years. “One well at a time” was the common refrain.

Therefore, to create the forecast below, Pace Global developed a scenario-based model. The scenarios themselves (more fully described below) were designed based on a synthesis of the information and opinions provided by the many developers, infrastructure operators, state officials and speculators interviewed in the course of Pace Global’s investigation, supplemented by a literature survey on the Williston Basin and Bakken formation and by ongoing research on the global and North American oil and gas industry. No attempt has been made to develop an independent geological assessment of the oil and gas development potential of the Williston Basin. Rather, the forecasts are based on operating plans and mean production expectations as shaped by the real-world constraints and options confronting Basin operators. Once again, it should be noted that much of the current Williston Basin development is in structures that are fairly well understood and therefore more predictable in terms of commercial success. It is only the speculation surrounding the oil production potential of the Bakken formation that led Pace Global to adopt a more probabilistic approach to electric load forecasting and rely on the results, activities and plans of current Williston Basin operators as the best current measure of future power demand.

Therefore, the results below should be considered a signpost – albeit a well-informed signpost – on where things stand today. Fortunately, transmission system investment optimization does not require perfect knowledge of future oil production at this time. The great majority of interviewed developers expressed the opinion that lack of system power service would not deter drilling plans, as natural gas is generally available to power prime movers and electric generator

sets. However, this same group shared the opinion that the operating improvements made possible by dispatched power supply would justify conversion should such service become available. Basin Electric and its members do not need to make speculative generation or transmission investments to encourage resource development or to capture the load growth that will occur due to that development.

Further, new and relevant information will become available over time that will permit the timely modification of any transmission plans if necessary. Mineral rights leasing information, including emerging trends in transaction volume, prices, geographic distribution and expiration dates, provides insight into the probable level and location of future drilling activity, and current thinking on the oil recovery potential of different locations. Well permitting activity, regional active rig counts and corporate drilling program announcements are all shorter-term but no less relevant sources of insight on future power demand trends. Therefore, Pace Global encourages Basin Electric to track these trends and modify the assumptions contained in the forecast that follows accordingly.

KEY FINDINGS

Pace Global found through the interview process that state agencies and developers generally agreed that there was a substantial amount of oil in the Williston Basin, particularly the Bakken formation, but recovery of that oil was going to be difficult. There was also a general consensus that the Bakken formation is not a uniform structure, and it is likely that there will always be sweet spots, marginal wells and areas where development will not occur. Most believe that drill operators have yet to determine the best way to drill and complete a Bakken well, and that there would likely be a gradual improvement in drilling and completion technology over many years rather than any breakthrough technology to dramatically alter Bakken well economics and activity abruptly at some point in the future.

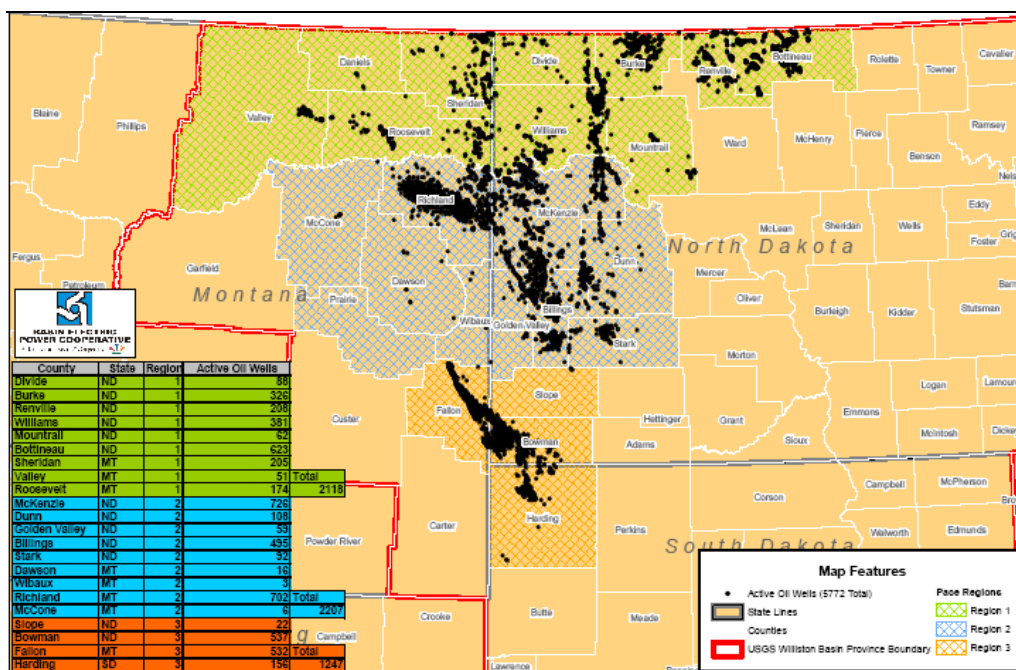
Prospective Oil & Gas Development in the Williston Basin

- Rapid large-scale development of the Williston Basin will be constrained by the limited availability of rigs, labor, service (oil equipment, technicians, repairmen, etc.) as well as hydraulic well fracturing equipment and materials.
- Lack of availability of electric power will not affect drilling plans, as all wells produce sufficient quantities of natural gas to be self-sustaining.
- Continued drilling activity will require long-term local oil prices of at least \$40-45 per bbl Williston Basin Sweet (WBS) at current drilling costs. If prices should drop below this threshold, drilling in the Williston would slow down dramatically. Industry would continue operating the pumps on existing wells until such time as operating costs exceed revenue (approximately 30 years).

Power Load Forecast

- At the direction of Basin Electric, Pace Global has divided the Williston Basin into three major regions for the purposes of the 2007 Power Load Forecast -- those regions have been identified in Exhibit 1.

Exhibit 1: Map of Pace Regions in the Williston Basin

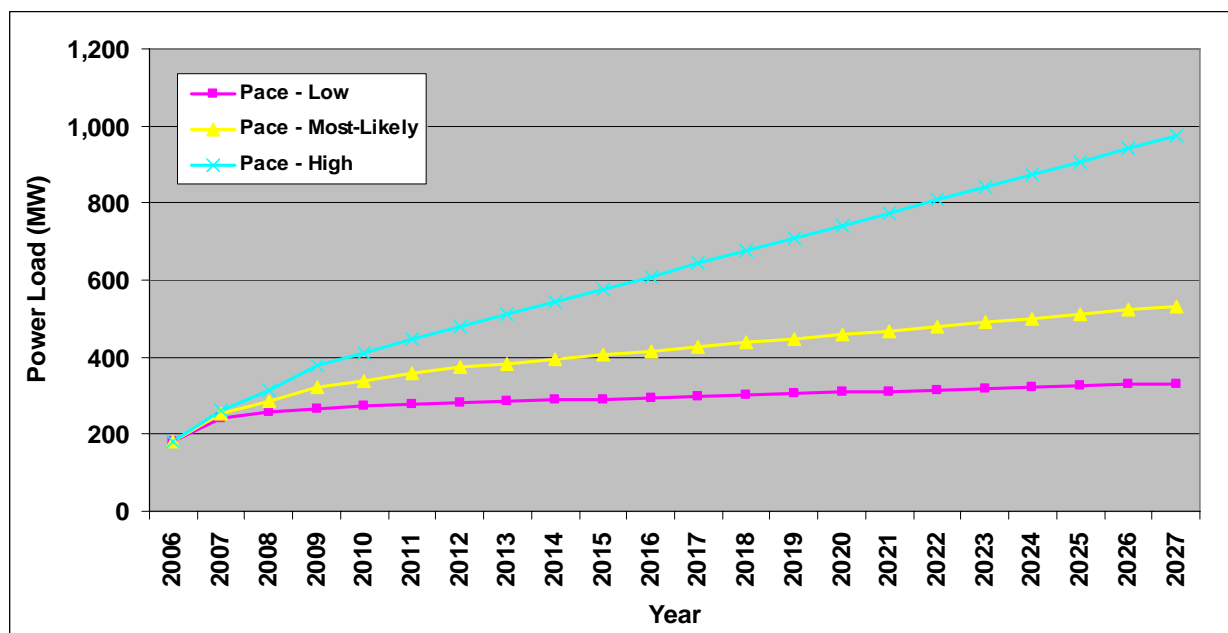


Source: Basin Electric.

- Power load requirements in all three regions of the Williston Basin are expected to increase over the next 20 years as high oil prices in excess of \$40-45 per bbl WBS are projected to support continued oilfield development activities. This growth is expected to be slow and steady, the rate of increase in oilfield development will be limited by the following factors:
 - Availability of drilling rigs, oilfield services, and skilled labor;
 - The time required to obtain title checks, drilling permits, and build locations to stay ahead of the drilling rigs; and
 - Gradual improvements in completion technologies for the Bakken formation.
- Power requirements in the Williston Basin will be long term as wells typically produce for 25 to 30 years, including wells under secondary or tertiary oil recovery methods.

- Industry generally has confidence in their development plans for the next two to three years, however, beyond that they are uncertain. The rate of continued development will depend on well economics which are driven by the following factors:
 - Market oil prices;
 - Average Estimated Ultimate Recovery (EUR); and
 - Drilling, completion, and operation and maintenance (O&M) costs.
- As depicted in Exhibit 2, Pace Global forecasted three (3) scenarios, largely driven by estimated drilling activity for the next 20 years. The vast majority of Industry's drilling plans were for 2007 and 2008, beyond this time period there was a high degree of uncertainty. As such, longer term drilling activity was extrapolated from short term plans and our interpretation of market sentiment for potential levels of sustained development over the twenty year forecast period. Industry did not have confidence in any additional enhanced oil recovery (EOR) activity, gas gathering large compressors and processing, and oil pipeline pumping requirements beyond what is currently planned for the next three to five years, therefore, Pace Global included only those currently planned incremental power additions in the forecast assumptions. Likewise, the oil production forecast only includes EOR production from currently planned EOR projects over the next several years. There is potential for additional power loads and oil production from future unplanned activities, which have not been included in the forecasts due to Industry's high level of uncertainty regarding their future development plans beyond the next several years.

Exhibit 2: Power Demand Projections by Scenario (MW)



Source: Pace Global.

Enhanced Oil Recovery in the Williston Basin

- Oil produced from Enhanced Oil Recovery (EOR) activity accounts for approximately 60% of the oil produced in North Dakota. Industry estimates there is approximately 60 MW of electric compression pumps in the EOR fields today, approximately 25% of which is awaiting power. EOR floods will be operated for 25 to 30 years.

Gas Gathering and Processing

- There is a general consensus amongst industry that additional gas processing and gathering systems are required in the Williston Basin. Much of the gas produced in the Williston Basin is associated gas, which is gas extracted during oil production. Recently, however, there has been activity targeting gas production. Several planned projects were included in the forecast assumptions.

Oil Price Forecast

- Crude oil price volatility could impact the level of oilfield development in the Williston Basin. Industry currently believes \$40-45 per bbl WBS is the minimum price required for Williston Basin oil wells to be economic. Over the next 20 years, Pace Global's expected case forecast averages \$56 per bbl of West Texas Intermediate (WTI) crude oil, the crude grade referenced in the New York Mercantile Exchange's (NYMEX) crude oil futures market.
- The Enbridge North Dakota pipeline has two planned expansions designed to transport increased North Dakota oil production to market, while the Enbridge Alberta Clipper and TransCanada Keystone projects are designed to transport increased oil production from the Alberta oil sands development. While the resulting incremental pipeline capacity from the three projects is not expected to be sufficient for the projected oil production from the Williston Basin, the completion of those projects will likely result in higher netbacks for North Dakota producers.

KEY INDICATORS OF FUTURE ACTIVITY AND LOAD

- **Rig Count.** There are currently approximately 53 rigs operating in the Williston Basin, 33 rigs in North Dakota, and 20 rigs in Montana. The developers believe that any increase in total rig count for the Williston Basin will be gradual (1 to 3 rigs per year) as current level seems to be at equilibrium with labor in oil related services. On the other hand, many in the industry have suggested that all rigs could be pulled out of the Williston Basin within a year, this, however, is not expected to happen. Given that electric driven well pumps accounts for 70% of the anticipated increase in electric load requirement over the forecast period, the number of wells that are drilled each year will impact anticipated load for the following 30 year period.
- **Leasing Activity.** A key indicator of future drilling activity in the Williston Basin can be attributed to mineral leasing activity over the next three years and the extent to which leases are picked up as they expire under their current leaseholder. The price paid for leases in the future should also be monitored; an upward trend may represent greater confidence by operators that they will drill prolific wells and a likelihood of higher drilling activity. The geographic distribution of new leasing activity, when combined with the lease prices and transaction volume, provides an indication of the future location, level of activity and anticipated production volumes for transmission system planning.
- **EOR.** EOR pilot projects should continue to be monitored, any successful pilots will likely result in a large increase in power requirements for that area in the ensuing years. At present, only approximately 5% of the active wells in the Williston Basin are currently producing from EOR, however, these wells account for almost 30% of the power load requirements of the oil related load in the region and 60% of all oil produced in North Dakota.

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- **Oil Pricing.** Sustainable development in the Williston Basin requires economic wells. Industry seems to believe that present drilling costs require oil prices above \$40-45 per bbl WBS for sustained development. A long term increase in oil prices from current level of \$65 per bbl WTI will likely result in increased drilling activity. On the other hand, assuming current drilling costs, if pricing levels should drop below \$40-45 per bbl WBS, drilling activity will likely slow dramatically.

PROSPECTIVE OIL & GAS DEVELOPMENT IN THE WILLISTON BASIN

The Williston Basin contains some of the top ranked U.S. onshore oilfields in terms of proven reserves and production, such as the Cedar Hills, Elm Coulee, and Pennel Fields. Pace Global met with North Dakota and Montana state officials, as well as seventeen oil and gas developers and three midstream pipeline companies in order to gain an understanding of current and future oil and gas development in the Williston Basin. Based on these interviews, Pace Global has drawn the following conclusions and generalizations.

NORTH DAKOTA OIL & GAS COMMISSION

The North Dakota Oil & Gas Commission (NDOGC) believes that large-scale development of the Bakken shale formation will be constrained by the limited availability of rigs, labor, service (oil equipment, technicians, repairmen, etc.) as well as fracturing equipment and fracturing materials. In the big oil boom of the late 1970's, the rig count went up from about 10 in 1973 to 147 rigs in 1983. However, this level of activity was not sustainable in a declining oil price environment and activity fell very quickly. The current active fleet of 33 rigs in North Dakota could drill a maximum of 300 wells in a year. NDOGC believes that the number of active rigs could increase by roughly 50% if all Montana rigs came to North Dakota. Beyond this, rig count will be constrained by lack of skilled labor.

A single developer will likely find it extremely difficult, if not impossible, to stay ahead of five rigs on a sustained basis in the Bakken formation. This is due to the extent of difficulty and complexity of running title checks on two sections (approximately two square miles) of land which is typically owned by several parties, since Bakken wells are typically drilled on 1,280-acre spacing. Running title checks require lawyers, land men and negotiations with several parties in most instances – this process takes a significant amount of time and money.

MONTANA BOARD OF OIL & GAS

According to a presentation at the Montana Geological Society Bakken Workshop in Billings, March 27, 1990, production from the Bakken formation was established in North Dakota in 1953. Outside of Antelope Field, the Bakken formation was not considered a primary target because it was generally impermeable, and produced primarily from natural fractures. Following the initial discovery, development of Bakken oil proceeded slowly until the current drilling activity began in the Elm Coulee Field located in Richland County, Montana in 2001.

Today, the Elm Coulee Field is a major Bakken play in Montana with approximately 500 operating wells. The play was discovered in 2000 and the field has since produced over 30

million bbl of oil. Currently there are 15 to 18 rigs operating in the Elm Coulee Field. Given the extent to which Elm Coulee has been developed, remaining prospective acreage could support another 150 wells, and that should take the current rig fleet about 18 months to drill. The Elm Coulee wells appear to be very prolific, and likely to produce oil for another 25 to 30 years.

The Montana Board of Oil & Gas (MBOG) believes that future activity in Montana will likely happen in the Madison, Ratcliff, and Dawson Bay formations, not just in the Bakken formation. Industry has been shooting a lot of 3-D seismic and it is very likely that they will find additional commercial quantities of oil to go after.

NORTH DAKOTA STATE LAND DEPARTMENT

This division is responsible for the management of over 2.5 million mineral acres in North Dakota. Four oil and gas lease auctions are held each year and leases are awarded to the company or individual offering the highest up-front payment (bonus) for the lease.

All of the mineral land of North Dakota is currently under lease - the majority of the leases are in the second year of a five year term. Leases that are not drilled in the five-year period are forfeited and put up for auction. It is possible to get 180 day extension if the leaseholder can demonstrate that reasonable efforts to develop the lease are underway and production within the extension term is likely. A second 180 day extension is also possible though unlikely: the state wants the lease developed so a leaseholder must make a very convincing case. If a well is drilled and produces oil or gas then the lease remains active as long as there is production.

On average, lease values have been increasing in recent years. Lease values vary tremendously upon location. Acreage overlying apparent sweet spots is expensive, but prices in much of the Williston Basin have peaked as evidence comes in that the Bakken formation is clearly not a homogeneous oil prospect.

The mature Bakken formation comprises an area of 90x180 miles or approximately 16,200 square miles. Conceivably all of this land could be drilled but drilling is expensive and many wells drilled in North Dakota to date have not been economic. Overall, the Bakken formation does not seem as prolific as some would wish but this may be a case where technology is lagging development plans.

INDUSTRY

There was a general consensus amongst the developers that the Williston Basin drilling activity would continue but development will occur slowly. Many believe that activity has peaked in the Williston Basin and drilling levels have stabilized. Ramping up activity in the region would

require that the “best way” to complete a Bakken well is discovered, even if one were determined it would take many years to identify, document, share information, bring in rigs and service people, etc. Developers expect that current practices will likely evolve over time as operators continue to experiment with new methods and results are analyzed.

A typical Bakken well is drilled vertically for 10,000 feet and horizontally for 9,000 feet on a single lateral, although some operators are drilling up to five laterals. Standard spacing for a Bakken well is 1,280 acres, or one well every two sections. Drilling and well completion costs are reported to have more than doubled over the past few years – a typical new well will cost \$2.5 million to \$6 million; the cost is largely driven by the number of laterals drilled. Wells are expected to produce approximately 300,000 bbl over their 25 to 30 year life. To date, no wells drilled into the Bakken formation have been reported to be dry holes but many are thought to be uneconomic. Pump-jacks are typically installed on a well after the first 30 to 45 days, and all wells will have a pump-jack installed on them regardless of whether the well is considered economic (including capital costs). Pump-jacks can be driven by an electric motor or a gas-fired engine, but industry strongly prefers electric. All wells will be continually operated as long as revenue exceeds marginal operating costs, typically around 30 years. Other, poorer wells will be operated intermittently to maintain the rights to the lease. Retaining the lease affords the operator the option to re-enter the well at a later date or drill other wells on the lease possibly to other formations.

Directional drilling costs about \$55,000 per day, about half of the cost is the rental rate on the drilling rig, and the other half is comprised of service and completion costs. Service prices have more than doubled since 2004, and have only recently showed signs of stabilizing. At today’s drilling costs, many development plans for the Williston Basin would be scrapped if WBS crude prices fell below \$40-45 per bbl, however, if drilling costs were to decrease the oil price threshold would decline as well.

POWER LOAD FORECAST RESULTS

This section of the report presents the 2007 Power Load Forecast results for our three scenarios, a comparison of power demand from the primary uses, and a discussion of projections.

Power load is derived from the following primary uses: electric motors driving surface pump-jacks, electric-driven field gas gathering, compressor stations and gas processing plants, EOR related pumping loads and booster pump stations on oil pipelines. Three scenarios were developed to categorize the potential for future incremental requirements in each of the identified primary uses; Low, Most-Likely and High. The scenarios should not be considered to encompass the full potential range of future power requirements in the Williston Basin, but rather an illustration of three levels of development activity derived from the interview process and current market sentiment on the long-term oil price environment.

Pace Global developed an Integrated Power Forecast Model (“IPFM”) for the 2007 Power Load Forecast to project annual power loads in the Williston Basin for 20 years in conjunction with oil field development. The IPFM is comprised of a set of Excel worksheets designed to analyze the level of drilling activity and to project oil production by year for 20 years. The IPFM converts horsepower requirements for future energy development related activity into power demand based on a wide variety of input assumptions. One of the assumptions is that a conversion factor of 0.746 is used to convert horsepower to electrical demand (kW). Demand requirements assume load factors of 80-100%, depending upon the scenario.

To forecast power load, assumptions were made regarding a number of key factors. These factors include, but are not limited to, the following: rig and service availability, total drilling activity, drilling activity by region, gas gathering and processing expansion plans, oil-pipeline expansion plans, incremental EOR related requirements and oil price forecasts.

Given the uncertainties of development in the Williston Basin, developers exhibited very little confidence on the level of future development, and therefore, most companies were in a limited planning horizon of one, perhaps two years. Many developers reported that drilling plans were determined on a well by well basis. Pace Global developed a drilling plan through 2011 based on the Industry’s drilling plans for 2007 and 2008. Longer term drilling activity was extrapolated from short term plans and our interpretation of market sentiment for potential levels of sustained development over the twenty year forecast period.

In addition, an oil well production decline curve was developed for the typical Williston Basin well based from historical well data provided by NDOGC, MBOG and South Dakota Department of Environmental and Natural Resources, Oil and Gas Section. Pace Global did not attempt to do verify formation characteristics or perform any reservoir simulation modeling as such work was determined to be outside of scope and budget and immediate purposes of this

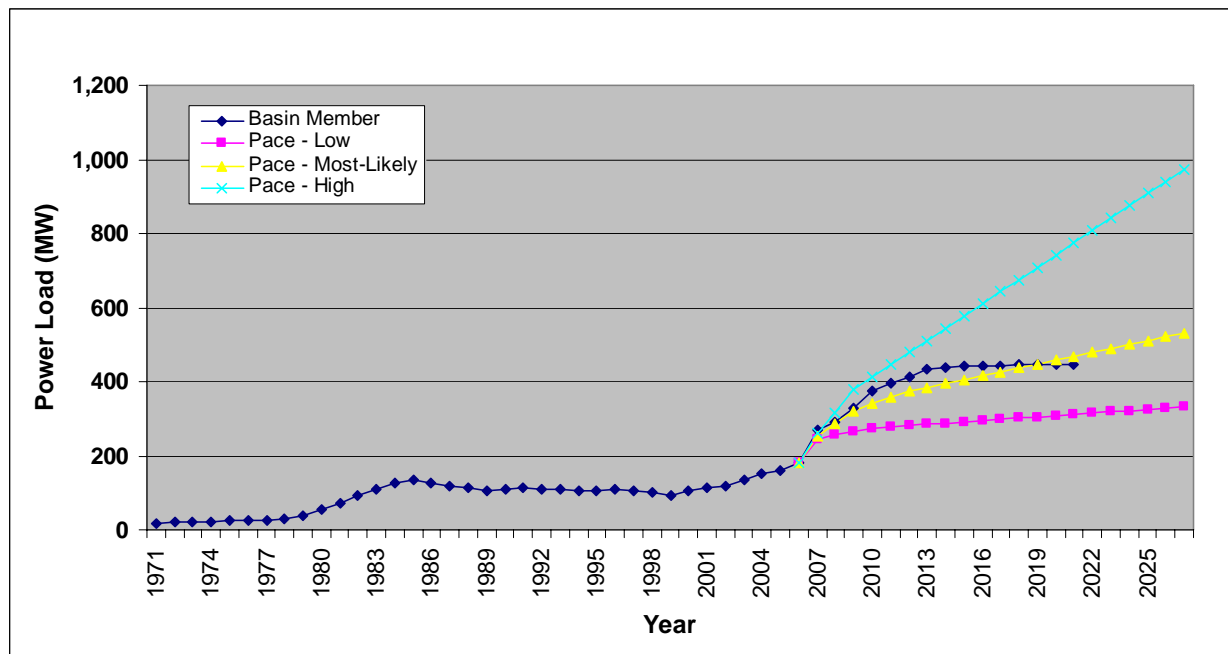
study. **The oil production forecast that is derived from the generic well profile does not drive our power load forecast.**

Industry did not have confidence in any incremental EOR activity; gas gathering, compression, and processing; and oil pipeline pumping beyond what is currently planned for the next three to five years, therefore, Pace Global included only currently planned incremental power additions in the forecast. **Future unplanned EOR and gas gathering, compression and processing loads represent a huge potential power requirement for the region that has not been accounted for in the Pace 2007 Load Forecast.**

The following graph, Exhibit 4, shows the forecasted electric power load by scenario. At Basin Electric's direction Pace Global assumes 100% market share of total incremental load requirements for oil development in the Williston Basin in Montana, North Dakota and South Dakota.³ Furthermore, the forecast assumes that all load requirements will be met by electricity from an unconstrained grid. While these projections include 20 years of forecasted drilling activity, they include only those planned incremental requirements for gas gathering, compression and processing, EOR activity and oil pipeline expansions that were identified over the next three to five years.

³ Power load reported throughout this report will assume the power load adjusted for Basin Electric's market share unless otherwise stated.

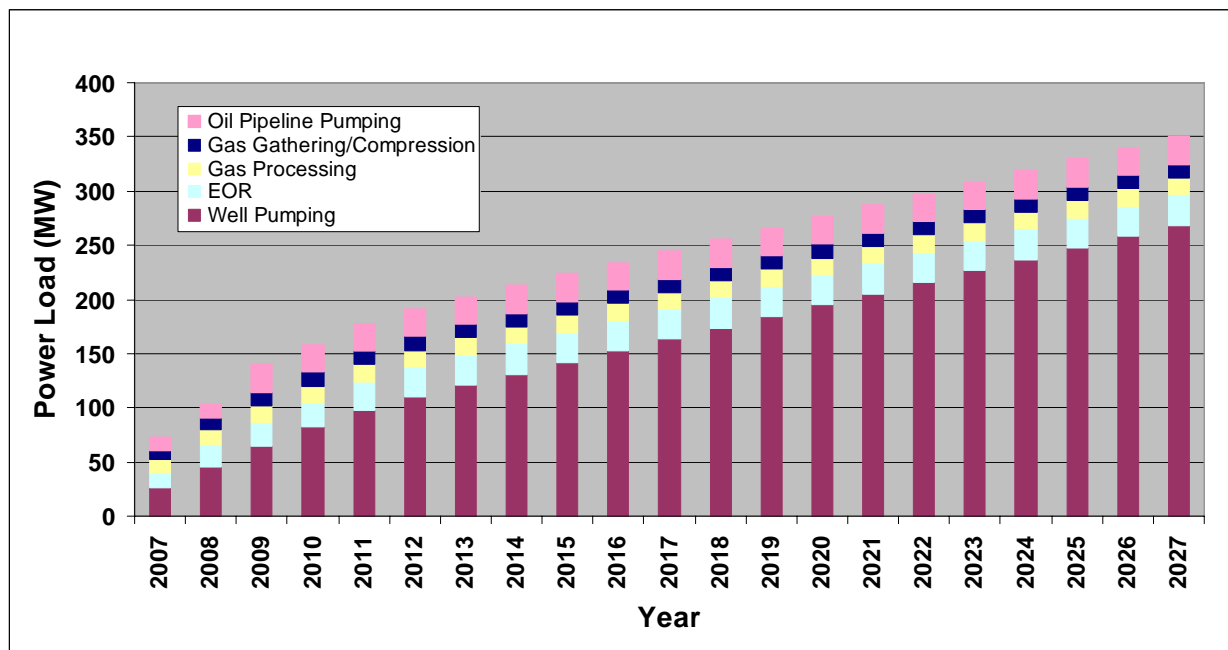
Exhibit 3: Total Oil Related Power Demand by Scenario (MW)



Source: Basin Electric, Pace Global.

Given that Pace Global does not include any future load requirements for major compressor stations after 2012, pumping oil and water from new wells represents the majority of incremental power load over the forecast period for each of the three scenarios. Pumping oil and water from wells account for approximately 70% of the total incremental load. Of the remaining 30%, planned EOR project requirements represent approximately 10%, gas gathering and processing approximately 15%, and oil pipeline pumping approximately 5%. Exhibit 4 shows the breakdown of the forecasted incremental power load by primary use under the Most-Likely Scenario.

Exhibit 4: Forecasted Incremental Power Load by Primary Use for the Most-Likely Scenario



Source: Pace Global.

The ratio of incremental power usage among the primary uses will vary slightly by region; however, pumping oil and water from wells remains a major consumer of power among all three regions. A comparison among the three regions is as follows:

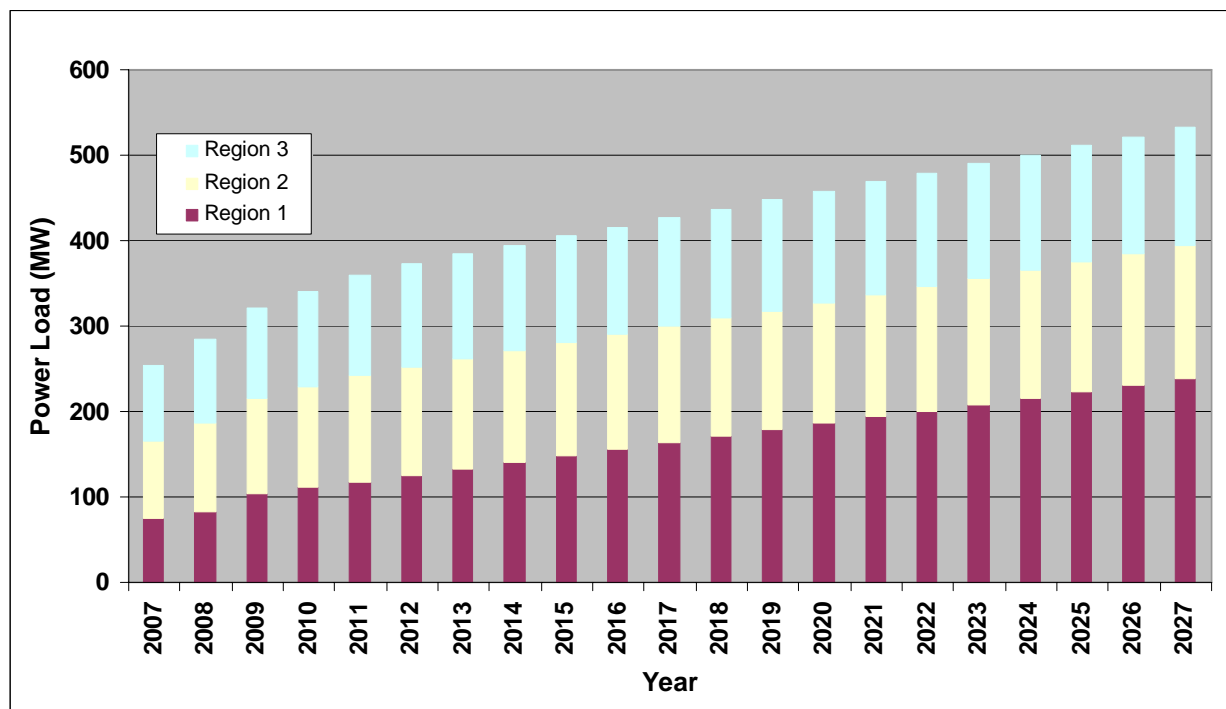
- **Region 1:** Overall, Region 1 is expected to have the smallest percentage of incremental power use for EOR activity. This region will require a greater percentage of incremental power use for gas processing and oil pipeline pumping based on current development plans. In the long term, Region 1 will require a greatest percentage of incremental power for well pumping as it is expected that additional rigs from Region 2 will move into Region 1 after the Elm Coulee Field is drilled up, thereby increasing the total number of new wells to be drilled in Region 1 above those to be drilled in Regions 2 and 3.
- **Region 2:** In the near term, Region 2 is expected to have a greater incremental power demand for well pumping as there are approximately 250 wells Elm Coulee Field awaiting power which we assume will be hooked up in 2007. Within Region 2, gas gathering and processing expansion plans will demand incremental power. No incremental oil pipeline pumping requirement is projected based on current development plans.

- **Region 3:** This region will require the greatest percentage of incremental power use for EOR activity and the least amount of power demand for new well pumping as compared to the other two regions.

MOST-LIKELY SCENARIO

The Most-Likely Scenario represents the best estimate of the expected level of development and corresponding power load requirements. This scenario assumes an average of 271 wells are drilled per year in the Williston Basin over the next 20 years, with 60% in Region 1, 27% in Region 2, and 13% in Region 3. The number of wells drilled in any one year ranges from a minimum of 231 wells to a maximum of 427 wells. Oil and water pumping requirements are assumed to be between 60-75 HP per well with a 0.746 conversion factor to electrical demand and a 100% load factor. In addition to new well requirements, the Most-Likely Scenario also includes adding power to 250 existing wells in the Elm Coulee Field which is located in Region 2. There are also two oil pipeline expansion projects as well as multiple gas gathering and processing requirements included. Cumulative power demand is expected to reach approximately 350 MW in the next five years and approximately 500 MW in the next 20 years. Exhibit 6 shows the Most-Likely Scenario power load forecast for all three regions of the Williston Basin.

Exhibit 5: Most-Likely Scenario for Total Power Demand by Region (MW)



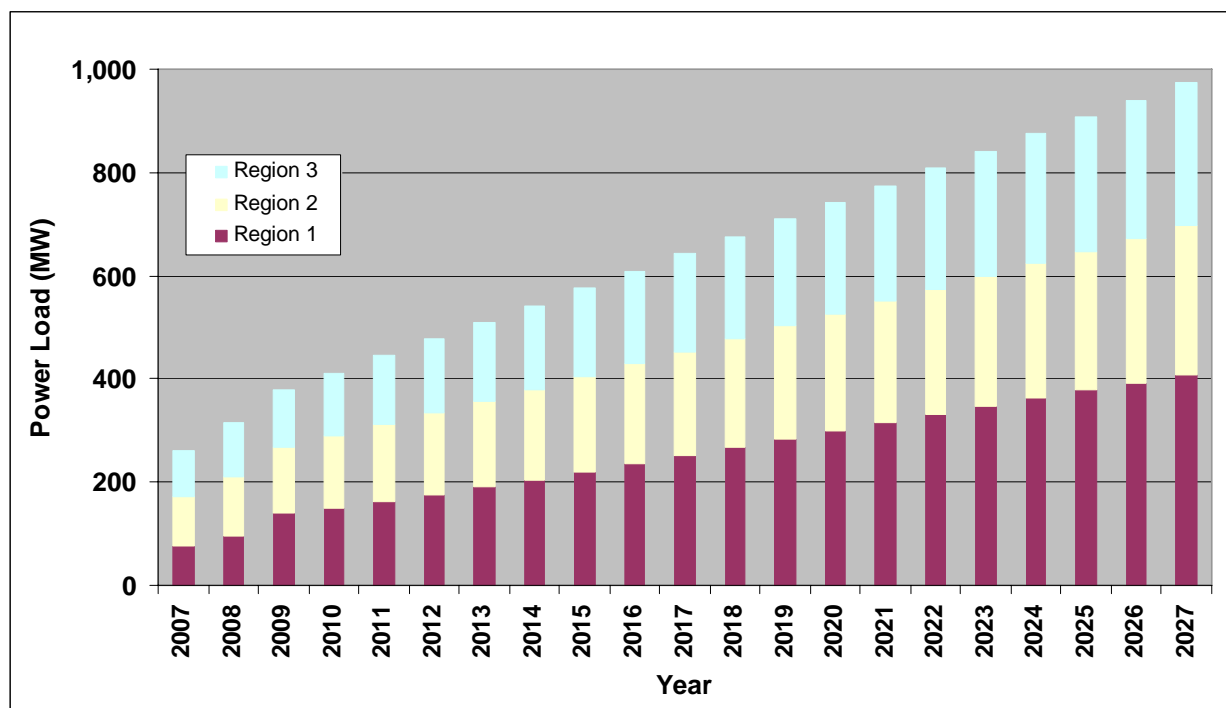
Source: Pace Global.

HIGH SCENARIO

The High Scenario represents an optimistic estimate of the expected level of development and power load requirements. The increased drilling activity accounts for much of the increase in power load requirements from the Most-Likely Scenario. The High Scenario is based on the premise of better technology and a higher oil price environment resulting in more Bakken development and a greater degree of success in wildcatting. The High Scenario assumes an average of 533 wells per year in the Williston Basin over the next 20 years, of which 47% of the wells will be drilled in Region 1, 32% in Region 2, and 21% in Region 3. The number of wells drilled in any one year ranges from a minimum of 434 to a maximum of 553. Oil and water pumping requirements are assumed to be higher than the Most-Likely Scenario at 75-100 HP per well operating at a 0.746 conversion factor to electrical demand and a 100% load factor. In addition to new well pumping requirements, the High Scenario also includes electrifying 250 existing wells in the Elm Coulee Field in Region 2. The High scenario is also optimistic in including 1,200 HP for EOR power demand in Region 2, which is not included in the Most-Likely or Low Scenarios. Similar to the Most-Likely Scenario, the High Scenario also includes incremental power demand for oil pipeline expansions, and gas gathering and processing.

Cumulative power demand is expected to reach approximately 450 MW in the next five years and approximately 950 MW in the next 20 years. Exhibit 6 shows the High Scenario power load forecast for all three regions of the Williston Basin.

Exhibit 6: High Scenario for Total Power Demand by Region (MW)



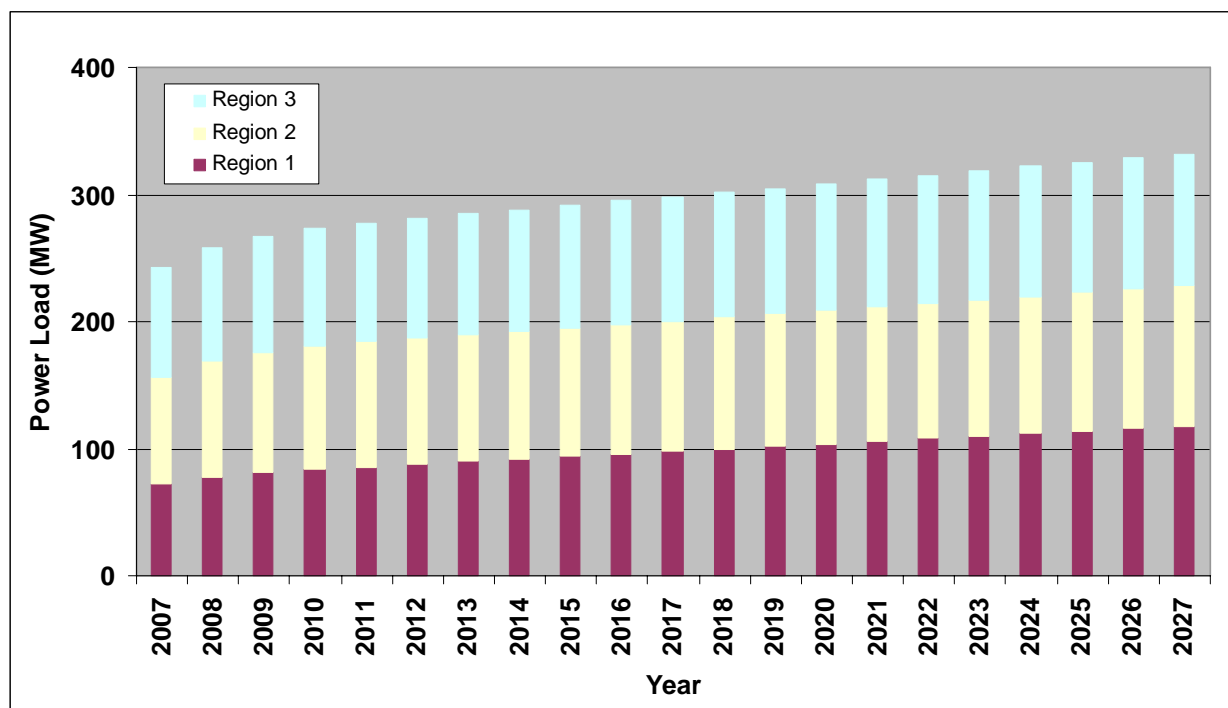
Source: Pace Global.

LOW SCENARIO

The Low Scenario represents a conservative estimate of the expected level of development and corresponding power load requirements. This scenario is based on a lower oil price forecast, marginal new technology advances and limited success in wildcatting. Overall, this scenario assumes fewer wells are drilled than other scenarios with an average of 127 wells per year in the Williston Basin over the next 20 years. It is assumed that 51% of the wells will be drilled in Region 1, 32% in Region 2, and 17% in Region 3. The number of wells drilled in any one year ranges from a minimum of 91 to a maximum of 378. Oil and water pumping requirements are assumed to be lower at 60 HP per well operating at a 0.746 conversion factor to electrical demand and load factors ranging from 80% in Regions 1 and 2 to 100% in Region 3. The Low Scenario does not include any incremental EOR activity, with the exception of an additional 3,683 HP for EOR power demand in Region 3. This scenario also includes less incremental power for oil pipeline pumping in Region 1 compared to the Most-Likely and High Scenarios.

Cumulative power demand is expected to reach approximately 250 MW in the next five years and approximately 300 MW in the next 20 years. Exhibit 7 shows the Low Scenario power load forecast for all three regions of the Williston Basin.

Exhibit 7: Low Scenario for Total Power Demand by Region (MW)



Source: Pace Global.

EOR IN THE WILLISTON BASIN

WHAT IS EOR?

Primary oil recovery through reservoir pressure depletion leaves behind a significant amount of the Original Oil In Place (OOIP) in the ground, developers believe that approximately 10% of OOIP is extracted by primary recovery methods. During the past 50 years, a variety of EOR methods have been developed and applied to mature and mostly depleted oil reservoirs in the U.S in order to improve the efficiency of oil recovery and ultimately extract more oil from existing wells. EOR processes involve injecting a gas or fluid into the reservoir to increase reservoir pressure or reduce oil viscosity in order to mobilize the oil. Injectants may include steam (thermal processes), polymers and gels (chemical processes), CO₂, nitrogen, and natural gas (gas processes), and microorganisms (microbial processes). These EOR methods are highly energy intensive and electricity is an important power source for operations in all EOR projects. Electric power is widely used for injecting air, water, gas, and injectants into oilfields in order to increase production. Although often highly effective, EOR methods are more expensive than primary recovery methods; consequently their application is increased during times of high oil prices and limited during times of low oil prices.

EOR METHODS IN THE WILLISTON BASIN

In the Williston Basin, operators are currently injecting water and high-pressure air in order to improve oil recovery from producing fields. Much of the current EOR activity in the Williston Basin is concentrated in Region 3 and is typically responsible for recovery of an additional 10-15% of the OOIP.

In secondary recovery, water wells are drilled and water is injected to boost the reservoir pressure and to increase oil sweep efficiencies. This process can be implemented after the well is completed or anytime thereafter.

Over the last 20 years, high-pressure air injection has also been used in the Williston Basin as a tertiary recovery method to successfully increase oil production. Air injection is a technique to enhance oil recovery that surged in popularity in the second half of the 1980's. This technique has several advantages but its primary benefit is that it draws air from its surroundings and simply requires an air compressor. Initial investment and operating costs are therefore lower than for other EOR methods. High-pressure air injection uses compressors to inject air into oil and natural gas formations in order to displace remaining resident hydrocarbons and force them under pressure to a common lifting point for production. Air injection is commonly used to oxidize and mobilize light gravity oils, which are characteristic of the Williston Basin, and is usually considered for reservoirs with high water cuts and low permeability that are unattractive

for water-flooding. In the Williston Basin, air injection has been used extensively in the Red River Formation along the Cedar Creek Anticline in Region 3 in such fields as the Pennel and Little Beaver Fields in Montana, the Medicine Pole Hills and Cedar Hills Fields in North Dakota, and the Buffalo Field in South Dakota. Air injection in the Medicine Poll Hills Field began in 1987 and has recovered approximately 10% of the OOIP. Air injection in the Buffalo Field began in 1983 and has recovered approximately 15% of the OOIP.

CO₂-EOR

CO₂ injection increases production by raising reservoir pressure and reducing oil viscosity. CO₂-EOR is particularly attractive because it not only is effective in increasing oil recovery, and it also serves as a way to sequester the CO₂ generated by power plants and other industries, thereby reducing greenhouse gas emissions.

During our interview process performed as part of this study, operators in the Williston Basin repeatedly expressed interest in CO₂ injection as an EOR method. It was reported that many of the large oil reservoirs in the basin have been identified as having favorable reservoir characteristics for CO₂-EOR when screened for depth, oil gravity, porosity and permeability. However, there is not a sufficient supply of CO₂ to support commercial CO₂-EOR operations in the Williston Basin. There are no naturally occurring sources of CO₂ in the region. One local industrial source of CO₂, the Great Plains Coal Gasification Plant in Beulah, North Dakota, has already sold most of its CO₂ output to Canadian oil producers under long-term contracts for use in CO₂-EOR in the Weyburn Field in Saskatchewan, Canada. Other anthropogenic sources could include: hydrogen plants, refineries, gas processing plants, chemical plants, and electric power plants, however, CO₂ capture and transportation are expensive and could easily exceed the value added. Likewise, aggregating and transporting more dispersed CO₂ sources located outside of the immediate area could easily prove to be cost prohibitive as well. Thus CO₂-EOR is not expected to become commercially operational in the Williston Basin until a cost effective supply of CO₂ becomes available.

EOR IMPACT ON POWER REQUIREMENTS

EOR is energy intensive and requires significant electric power to operate injection wells and pump the associated increased production volumes.

Operators believe existing EOR wells in Region 3 will continue to produce for another 25-30 years. Oil produced from EOR activity in Region 3 currently accounts for approximately 60% of the oil produced in North Dakota. With the addition of new EOR activity, power requirements for EOR in Region 3 are expected to increase by approximately 33,000 HP or 24.6 MW by 2010.

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EOR is not expected to work in much of the Bakken shale formation, but the Elm Coulee Field in Region 2 is considered to have potential. There is a pilot project planned in the Elm Coulee for 2007 that will require approximately 1.5 MW that should be monitored because, if successful, EOR methods (likely air or nitrogen injection) could be applied very quickly and require a substantial amount of power. The Nesson Anticline is a naturally fractured area of the Bakken shale formation in Regions 1 and 2 which may also allow for EOR, although no such projects currently exist or are planned for the next five years. There are areas of the Nisku and Madison formations where EOR should work very well – such areas of those formations are primarily located in Region 3.

GAS GATHERING, LARGE COMPRESSORS AND PROCESSING

There is a general consensus amongst industry that additional gas gathering and processing systems will be required in the Williston Basin. Much of the gas currently produced in the Williston Basin is associated gas that is extracted during oil production. Associated gas is “wet gas”, with high Btu content (1,400-1,500 Btu/scf vs. 950-1,050 Btu/scf for typical pipeline-quality gas). In addition to associated gas from oil production, some operators in the Williston Basin are planning to drill shallow gas wells or drill deeper into the Red River formation for gas. The Red River formation is located below the Bakken shale formation at around 12,000 feet. Gas production from the Red River formation is generally of poor quality, as it is both high in sulfur content and low in Btu content. With the future increase in associated gas production and the potential for targeted gas wells, additional gas gathering and processing will be required, and Pace Global learned of several such projects planned to be in-service over the next few years.

Pace Global learned of three new gas processing plants to be located in Region 1. Each plant will require approximately 1.2 MW of power on a sustained average basis, with a peak requirement of around 1.5 MW. This equates to roughly 3.6 MW of new power load for Region 1. In addition, a large gas processing plant in Region 1 is exchanging its existing gas-fired compressors for electric units. This plant is expected to add approximately 7,000 HP of electric compression (~5.3 MW) in 2007 and another 3,000 HP (~2.3 MW) in 2009. These projects result in approximately 11.2 MW of incremental electric power requirements for Region 1.

A gas processing plant in Region 2 is currently undergoing expansion, adding approximately 4,000 HP (~3.0 MW) of electric compression that is scheduled to come online in 2007. The gathering system there currently operates on 29,000 HP of compression of which approximately 30% or 8,700 HP (~6.5 MW) is electric, the remainder being gas-fired. There are no plans to switch out these gas-fired compressors. There is also a 3,000 HP (~2.2 MW) unit in western Richland County in Region 2 waiting for electricity to become available. These projects result in approximately 5.2 MW of incremental electric power requirements for Region 2.

Pace Global learned of one new gas processing plant under construction in Region 3 that will require approximately 4,000 HP (~3.0 MW). In addition, there could be incremental gathering compression added to the area but those are likely to be gas-fired due to the perceived lack of power availability in the area.

Power requirements for the above mentioned projects have been included in the Pace 2007 Load Forecast. If the development of targeted gas wells becomes successful and increased volumes of both associated and non-associated gas are produced, greater compression capacity could be required beyond what is currently planned and included in the IPFM input assumptions over the next several years. Future unplanned gas gathering, compression and processing capacity

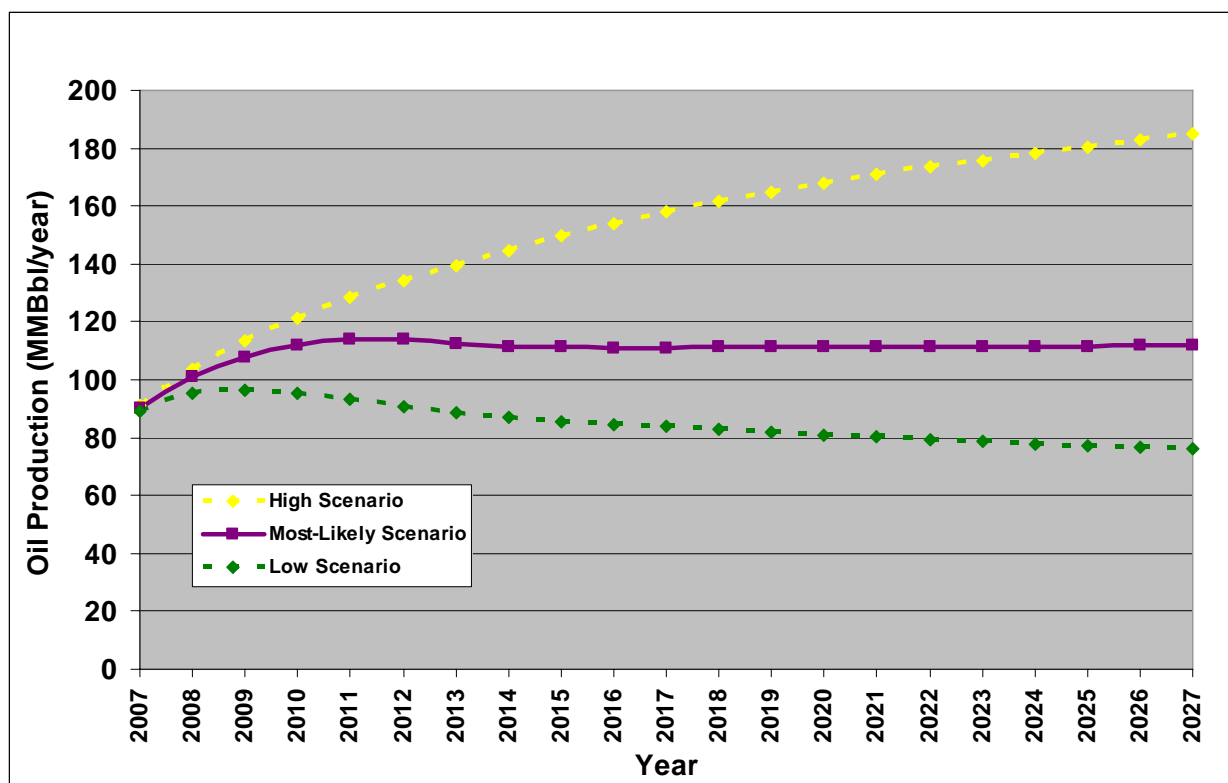
represents additional potential power requirements for the Williston Basin which have not been accounted for in the Pace 2007 Load Forecast.

Overall, developers strongly prefer electric motors over gas-fired engines, as electric motors free up compressor fuel for selling into the market, and are much more reliable and flexible than gas-fired engines. This is especially true in the cold winters which are commonplace for this area of the U.S. In addition, the capital cost of electric driven compressors is typically 30% less than for gas engine driven compressors. Electric compressors also have a slight advantage over natural gas compressors in terms of mechanical availability and lower maintenance costs.

CRUDE OIL

This section of the report discusses issues associated with crude oil production in the Williston Basin, which include: Pace Global's crude oil production forecast and long-term oil price projections, and oil pipelines. Developing an understanding of these fundamentals is important to accurately forecasting power load in the Williston Basin, because oil production provides the majority of the revenue stream necessary for ongoing development (natural gas sales account for the remainder of the revenue generated but gas production was not part of this study). Exhibit 8 presents a comparison of annual oil production for the Low, Most-Likely, and High Scenarios.

Exhibit 8: Total Crude Oil Production Forecast



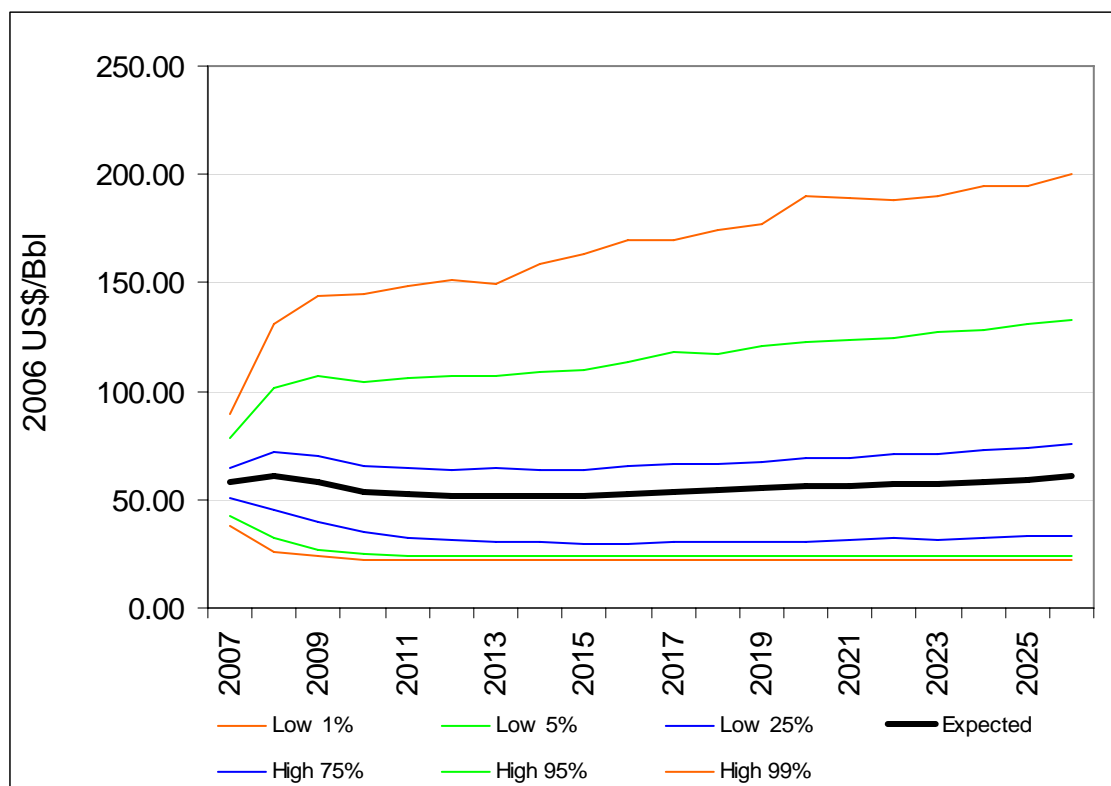
Source: Pace Global.

WTI COMMODITY PRICES

Through the interview process, Pace Global learned that anticipated crude oil prices could directly and quickly affect the rate of oilfield development in the Williston Basin. Developers state that \$40-45 per bbl WBS is the threshold price for economic oil wells in the Williston Basin, and if oil prices were to fall below \$40-45 per bbl WBS, drilling activity in the basin would likely decline. The WBS price is highly correlated to the WTI price. Pace Global's Q2 2007 WTI Oil Price Forecast is provided below in Exhibit 9. Over the next 20 years, the expected case WTI forecast averages \$56 per bbl and never drops below \$50 per bbl, thus supporting continued development of the Williston Basin assuming that operating costs remain at current levels or decrease over time. If operating costs continue to increase then oil prices will need to increase at a similar or faster rate to sustain development plans in the Williston Basin.

The uncertainty about the dynamic behavior of future oil prices increase as the forecast period is extended over time. This uncertainty is quantified by developing future price distributions, as shown by the stochastic bands in Exhibit 9, corresponding to various confidence levels. The stochastic bands are constructed from an analysis of defined and undefined risks resulting from market forces, weather disasters, unexpected changes in regulatory requirements, and political events.

Exhibit 9: Pace Global's Q2 2007 WTI Oil Price Forecast



Source: Pace Global.

Crude Oil Market Drivers

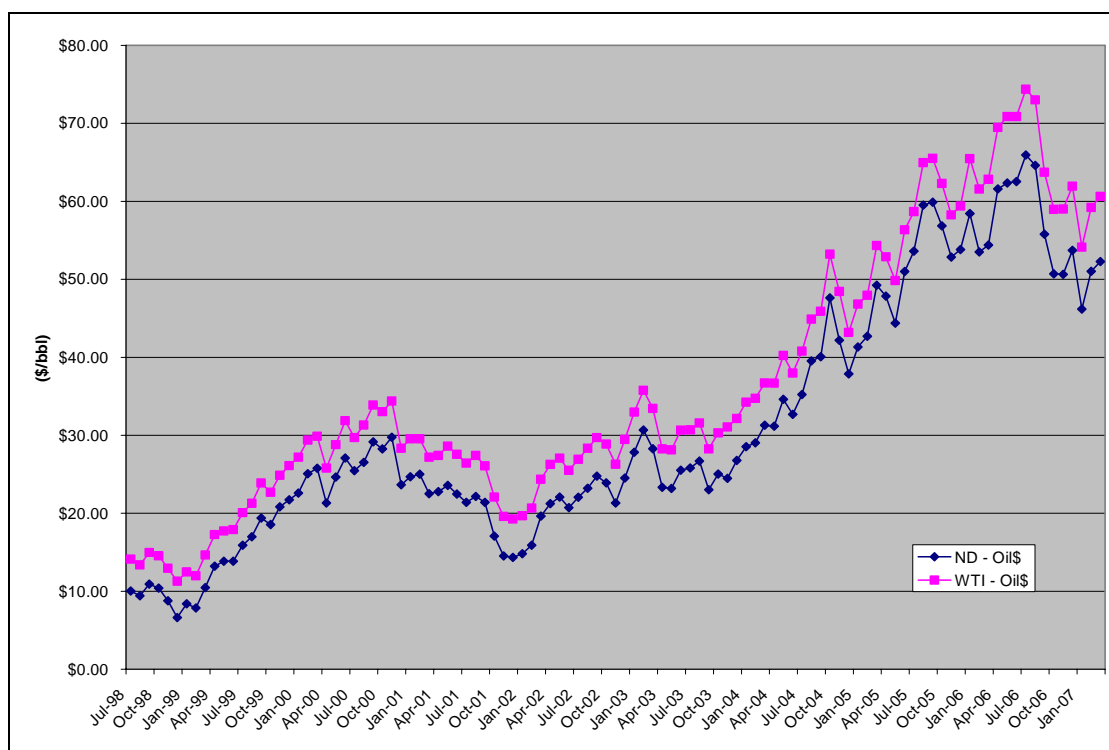
Pace Global forecasts that oil prices will be higher and more volatile in the future than they have been historically for a number of key reasons. Oil markets are dynamic as prices respond to continuing changes in the demand and supply of energy. World oil demand is growing faster than in the past and is expected to continue to grow strongly. Growing economies in China and India, which together account for almost 40% of the world's population, are expected to drive increased world demand for oil over the next 20 years. On the supply side, numerous countries are experiencing depletion of their low-cost oil reserves, which requires the development of higher-cost resources. In addition, the global political environment now appears less promising for oil production growth given the security situation in the Middle East and non-OECD governments are restricting private sector access to their oil resources. High oil prices, however, are fostering increased worldwide exploration and development activities. Pace Global forecasts growth in non-OPEC oil production levels over the next several years in response to large profits being realized at the current prices of \$55-\$60 per bbl WTI. Pace Global does not expect a

significant drop in oil prices, despite the large increase in non-OPEC oil supplies over the next five years. OPEC is expected to allow minor price reductions over the next five years in order to prevent a major loss of market share, but after 2014 continued demand growth and depletion of finite resources are expected to cause real price increases.

Williston Basin Sweet Oil Prices

As illustrated in Exhibit 10, historical monthly average prices for WBS and WTI have been highly correlated over the past ten years.

Exhibit 10: Historical Prices for WBS and WTI



Sources: Pace Global, Basin Electric, and Platts.

Pace Global's independent forecast of WBS is comprised of commodity prices, as represented by the price for WTI oil on the NYMEX (the price paid for oil at Cushing, Oklahoma) plus a regional adjustment to reflect price differentials between WTI and WBS as shown in Exhibit 11. Over the next 20 years, the WBS price is not expected to drop below \$47 per bbl, thus supporting continued development of the Williston Basin assuming that operating costs remain at current levels or decrease over time.

Exhibit 11: Forecasted Prices for WTI and WBS (in Real 2006 \$/bbl)

Year	WTI			WBS		
	Low 25%	Expected	High 75%	Low 25%	Expected	High 75%
2007	50.73	58.37	64.73	44.64	51.37	56.96
2008	45.32	60.96	72.21	39.88	54.86	63.54
2009	39.91	58.00	70.57	35.12	52.20	62.10
2010	34.87	53.69	65.87	32.08	49.39	60.60
2011	32.73	52.75	64.60	30.11	48.53	59.43
2012	31.50	52.12	64.06	28.98	47.95	58.94
2013	30.84	51.97	64.71	28.37	47.81	59.53
2014	30.32	51.74	64.06	27.89	47.60	58.94
2015	29.74	51.81	63.83	27.36	47.67	58.72
2016	29.94	52.75	65.19	27.54	48.53	59.97
2017	30.18	53.74	66.42	27.77	49.44	61.11
2018	30.37	54.01	66.76	27.94	49.69	61.42
2019	30.36	54.95	67.61	27.93	50.55	62.20
2020	30.79	55.94	69.02	28.33	51.46	63.50
2021	31.10	56.21	69.54	28.61	51.71	63.98
2022	31.87	57.04	70.63	29.32	52.48	64.98
2023	31.67	57.31	71.09	29.14	52.73	65.40
2024	32.15	58.26	72.73	29.58	53.60	66.91
2025	32.78	59.42	73.98	30.16	54.67	68.06
2026	33.51	60.61	75.64	30.83	55.76	69.59

Source: Pace Global 2007 Q2 Outlook.

OIL PIPELINE INFRASTRUCTURE

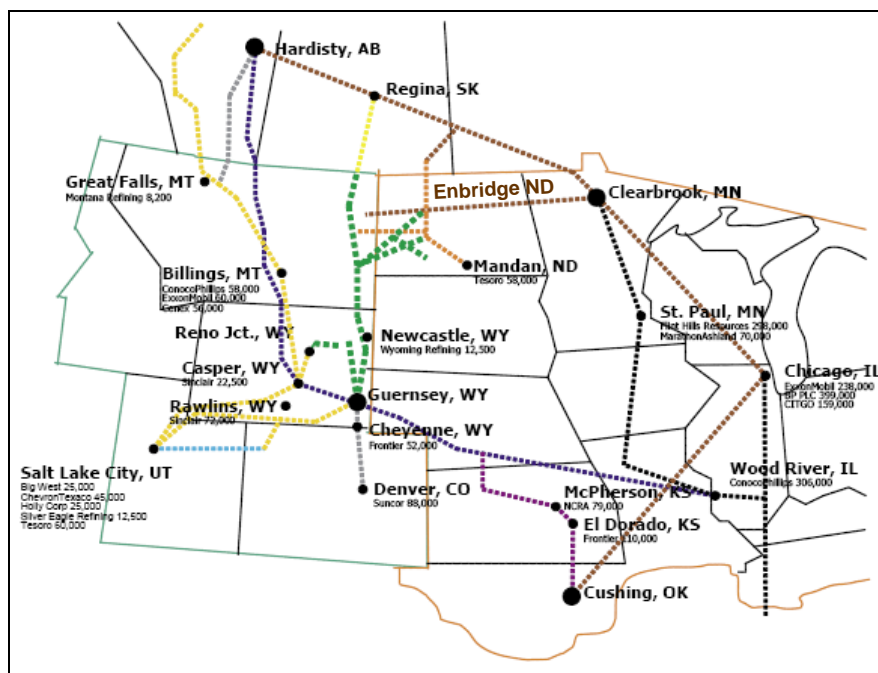
North Dakota oil production can be exported on one of two oil pipelines: Enbridge or All-American Plains Pipelines. There are several interstate oil pipelines that originate in Canada traverse North Dakota, Montana and Minnesota. These oil pipelines transport increasing quantities of heavy oil extracted from the Alberta tar sands projects to refineries in Wyoming, Colorado, Minnesota and Illinois. Much of the regional oil infrastructure is operating at maximum capacity.

North Dakota Export Pipelines

Enbridge owns and operates the one major pipeline in North Dakota transporting North Dakota oil production to market. The Enbridge Pipeline is located in Region 1, running from Trenton and Alexander, North Dakota to market at Clearbrook, Minnesota (the “Enbridge North Dakota” pipeline). The Enbridge North Dakota pipeline has capacity to deliver approximately 100,000 bbl per day, and has been operating at full capacity since February 2005.

The All-American Pipeline is located along the eastern edge of Montana and runs north to south, delivering oil into the Butte system that transports it to the Guernsey, Wyoming market. The Butte Pipeline has historically been an export pipeline for Williston Basin production. However, since March 2005, the Guernsey market has been flooded with Canadian oil production and deliveries from Butte have been squeezed out. As such, the All-American Pipeline operates at low utilization levels. See Exhibit 12 for an illustration of the regional oil infrastructure.

Exhibit 12: Regional Oil Infrastructure

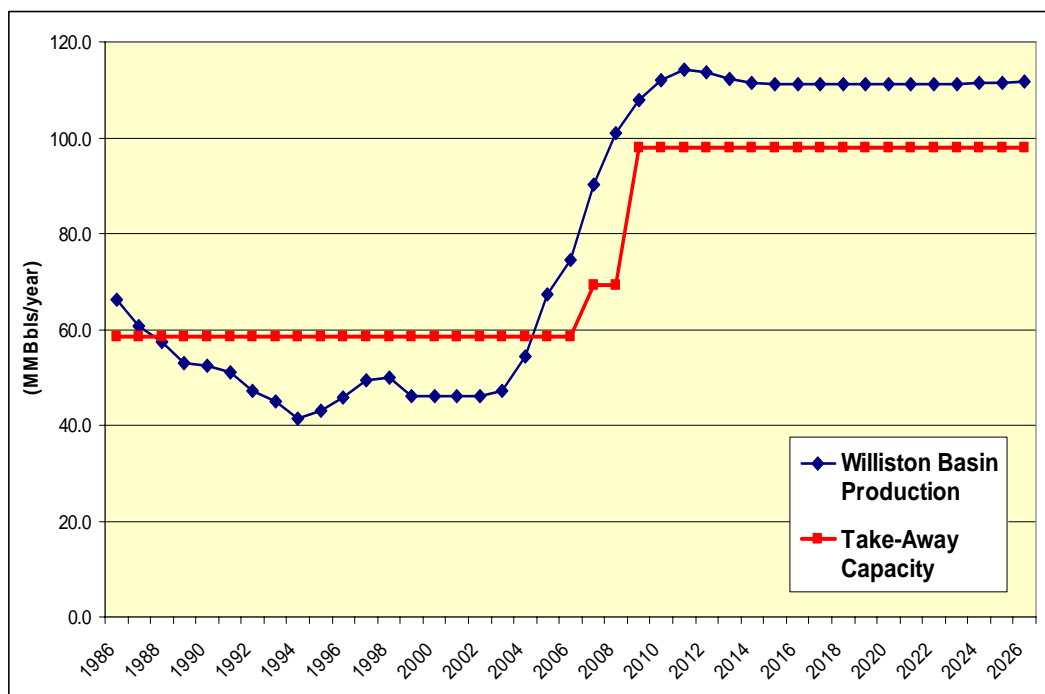


Source: IOGCC, Pace Global.

Enbridge has plans to increase compression on the North Dakota pipeline by 19,000 HP in 2007 and another 19,000 HP in 2009. The second expansion will involve six to ten miles of looping on the western side of each compression location. The two expansions will require approximately 28 MW and add 88,000 bbl per day of export capacity. Total pipeline capacity will be 188,000 bbl per day after the second expansion comes online in 2009. See Exhibit 13 for an oil pipeline capacity analysis assuming Pace Global's Most-Likely Scenario oil production and two Enbridge expansions coming online as planned. Given that the second expansion will bring the Enbridge pipeline up to its maximum allowable operating pressure (MAOP) of 1,480 psig (pounds per square inch – gauge pressure), any additional export capacity will require a major pipeline looping project. Even with these planned expansions, Exhibit 13 demonstrates

that the incremental capacity is not expected to provide sufficient pipeline takeaway capacity for the projected Williston Basin oil production.

Exhibit 13: North Dakota Oil Pipeline Capacity Analysis



Source: Enbridge, Plains All-American and Pace Global.

Interstate Expansion Projects

There are several projects currently planned to alleviate constraints in and around North Dakota. The aforementioned Enbridge North Dakota expansion is designed to transport increased North Dakota oil production to market, while the Enbridge Alberta Clipper and TransCanada Keystone projects are designed to transport increased oil production from the Alberta oil sands development. Given that oil production from the Alberta oil sands is currently transported on pipelines previously dedicated to Williston Basin oil production, all three pipeline projects will likely result in higher netbacks for the Williston Basin producers.

Enbridge

The Alberta Clipper project is a proposed 400,000 bbl per day line that would run alongside the company's existing mainline which provides service between Hardisty, Alberta, and Superior, Wisconsin. The existing mainline has a capacity of about 2 million bbl per day. The 1,000-mile segment has been proposed to shippers to resolve expected capacity constraints and is planned to be in service late 2009.

Exhibit 14: Enbridge Expansion Projects



Source: Enbridge.

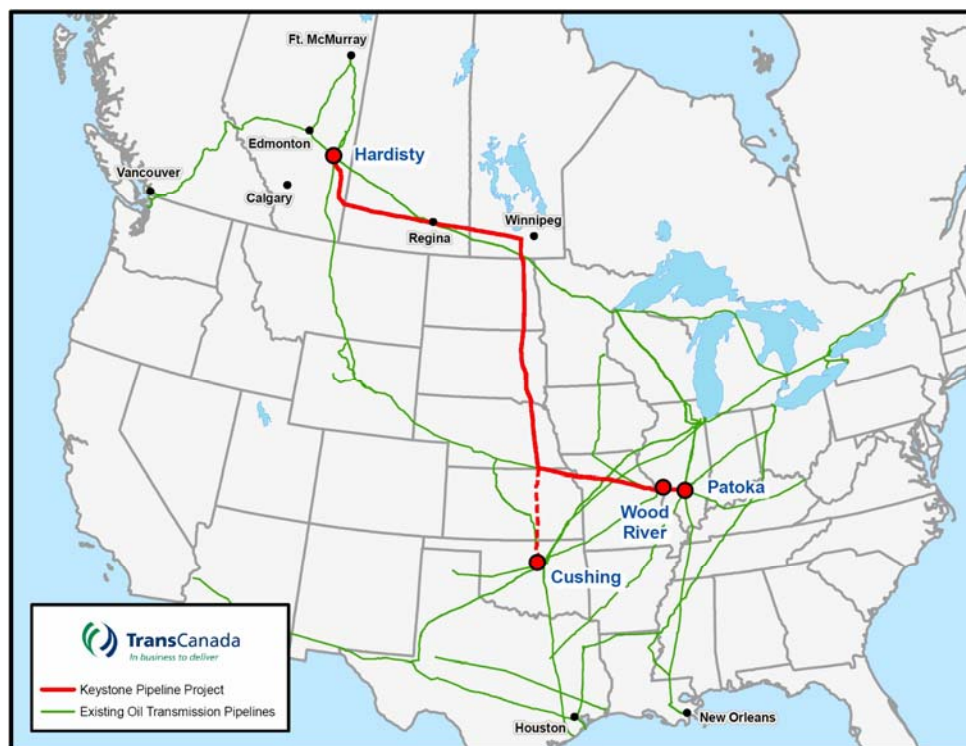
TransCanada

TransCanada's Keystone Oil Pipeline ("Keystone") will be capable of transporting approximately 435,000 bbl per day of crude oil from Alberta, Canada to markets in the U.S. Keystone would initiate at the crude oil supply hub near Hardisty, Alberta and terminate near the crude oil storage and pipeline hub near Patoka, Illinois. Keystone would also interconnect with other existing crude oil pipelines that could supply refinery markets in Cushing, Oklahoma,

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Wood River, Illinois and the U.S. Gulf Coast. The total length of the proposed Keystone Pipeline is 1,830 miles. Approximately 1,070 miles of new pipeline will be constructed in the U.S. The Canadian portion of the proposed project includes the construction of approximately 230 miles of new pipeline and the conversion of approximately 530 miles of existing TransCanada pipeline from natural gas to crude oil transmission. The new pipeline will be 30 inches in diameter except for the 55 miles downstream of the Wood River, Illinois refinery interconnection heading in an easterly direction to Patoka, Illinois where the diameter would be 24 inches.

Exhibit 15: Proposed TransCanada Keystone Project



Source: TransCanada.

Appendix A: Integrated Power Forecast Model

Pace Global developed an Integrated Power Forecast Model (“IPFM”) to project annual electric power loads in the Williston Basin for the next 20 years in conjunction with oil field development. The IPFM is comprised of a set of Excel worksheets designed to forecast the level of drilling activity and to project annual oil production for the next 20 years. The IPFM converts oil field development projections into power demand based on a wide variety of input assumptions, including short-term development plans of producers, existing well data and oil price forecast.

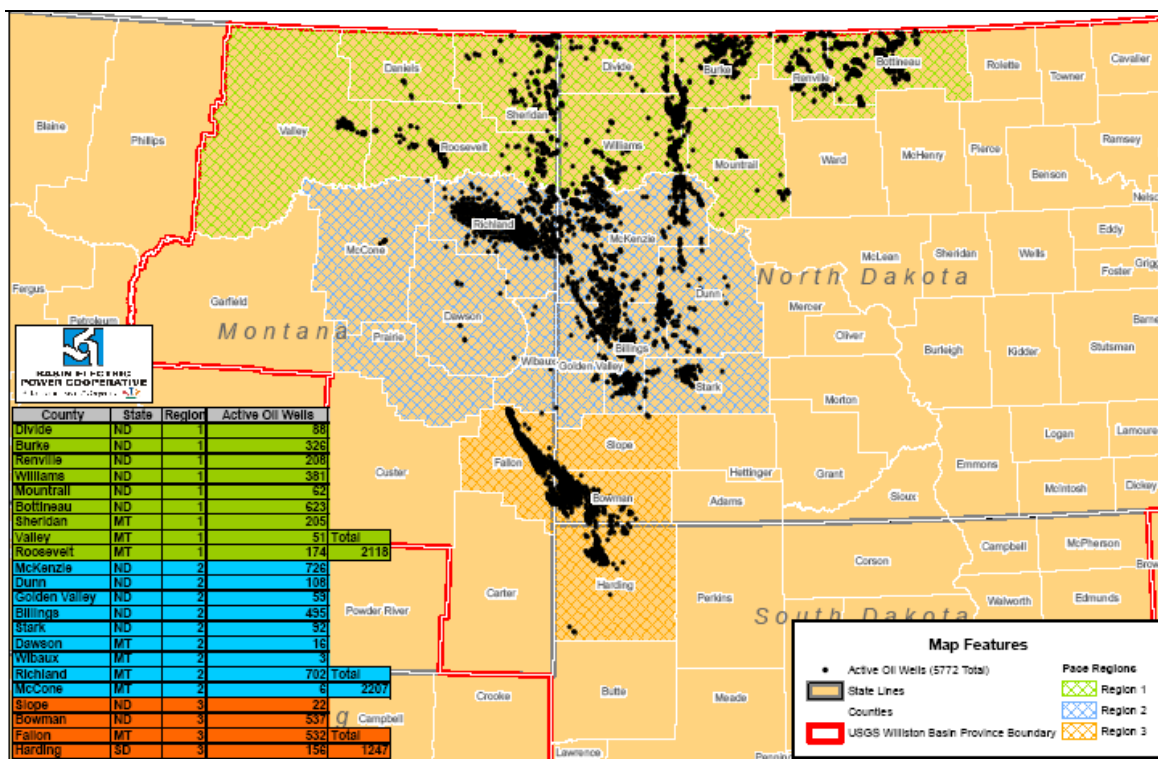
OVERVIEW OF APPROACH

To forecast power requirements for the entire Williston Basin, the IPFM requires inputs for drilling rig counts, average well Estimated Ultimate Recovery (EUR), average well oil production profile, and power requirements for pumping oil and water from wells, EOR activities, gas processing, gas gathering and compression, and oil pipeline pumping.

Pace Global divided the Williston Basin into three regions, as shown in Exhibit 16, so results would be more easy to comprehend and useful to Basin Electric in the planning of transmission and distribution systems. Each of the three regions has its own set of assumptions and power load forecast.

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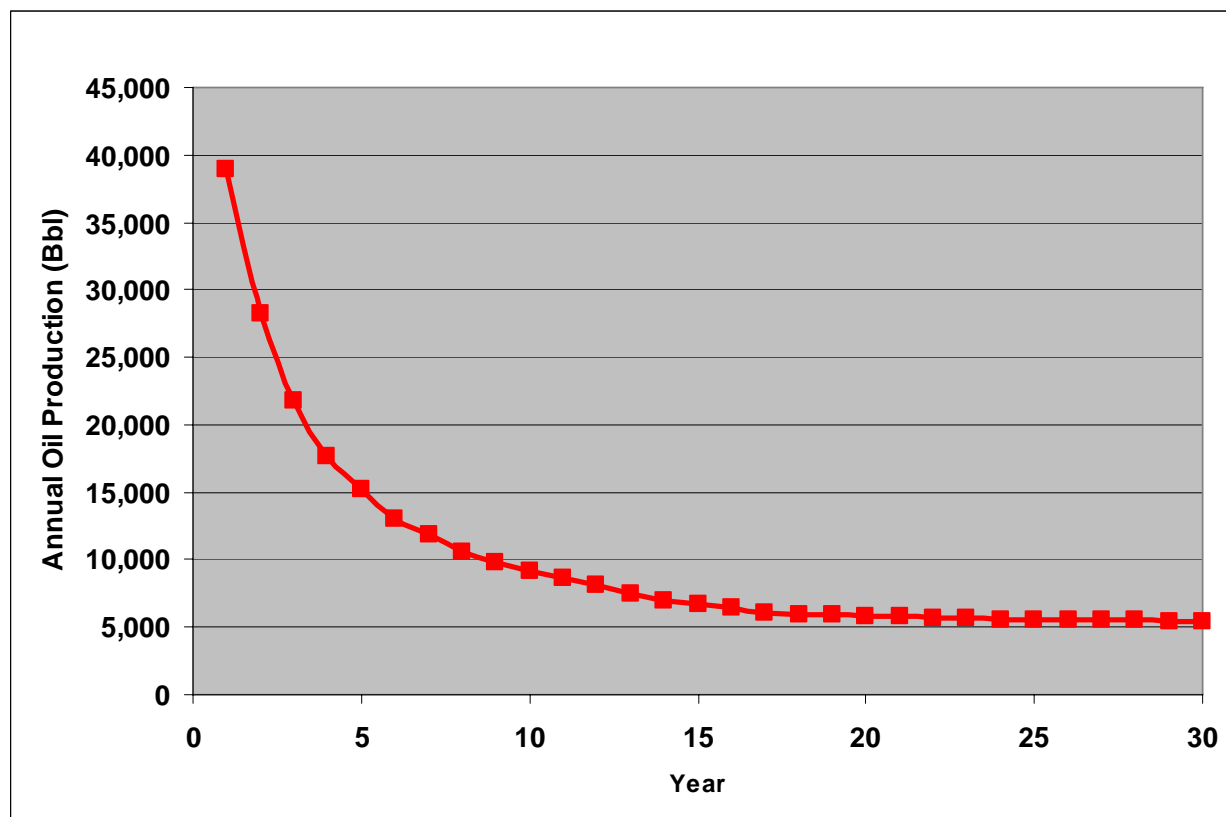
Exhibit 16: Map of Regions 1-3 in the Williston Basin



Source: Basin Electric, IHS Energy.

Historical oil well production data was obtained from the state oil and gas databases by county for each of the three regions. From the historical oil production data, Pace Global developed an average Williston Basin oil production decline curve by averaging historical production decline curves of randomly selected wells from all three regions. The resulting production decline curve, shown in Exhibit 17, was translated into a production profile giving the percent of the total EUR that is produced each year in the life of a well in order to forecast new incremental oil production.

Exhibit 17: Williston Basin Average Well Decline Curve



Source: Pace Global.

The average new well EUR was assumed to be 300,000 bbl (approximately 10% OOIP) over a 30 year life. In order to forecast the decline of existing production, the average year in well life was calculated for each region. Existing 2006 production by region was then declined according to the average decline curve starting in the average year in well life of that region. New EOR production was forecasted by assuming an additional 10% of OOIP could be recovered using tertiary recovery methods and the number of wells was derived from estimates of planned EOR power requirements provided by industry, assuming 500 HP per well based on existing EOR experience in the Williston Basin. No future EOR projects were included in the load forecast beyond what is currently planned for the next seven years as it was determined that the uncertainty is too great to forecast with any accuracy. Total oil production was then forecasted by adding existing production, incremental production from new drilling, and incremental production from currently planned EOR activity. Total oil production was forecast for 20 years for each of the three regions and for each of the three scenarios: Low, Most-Likely, and High. Oil production, however, was not used as a driver in forecasting power loads.

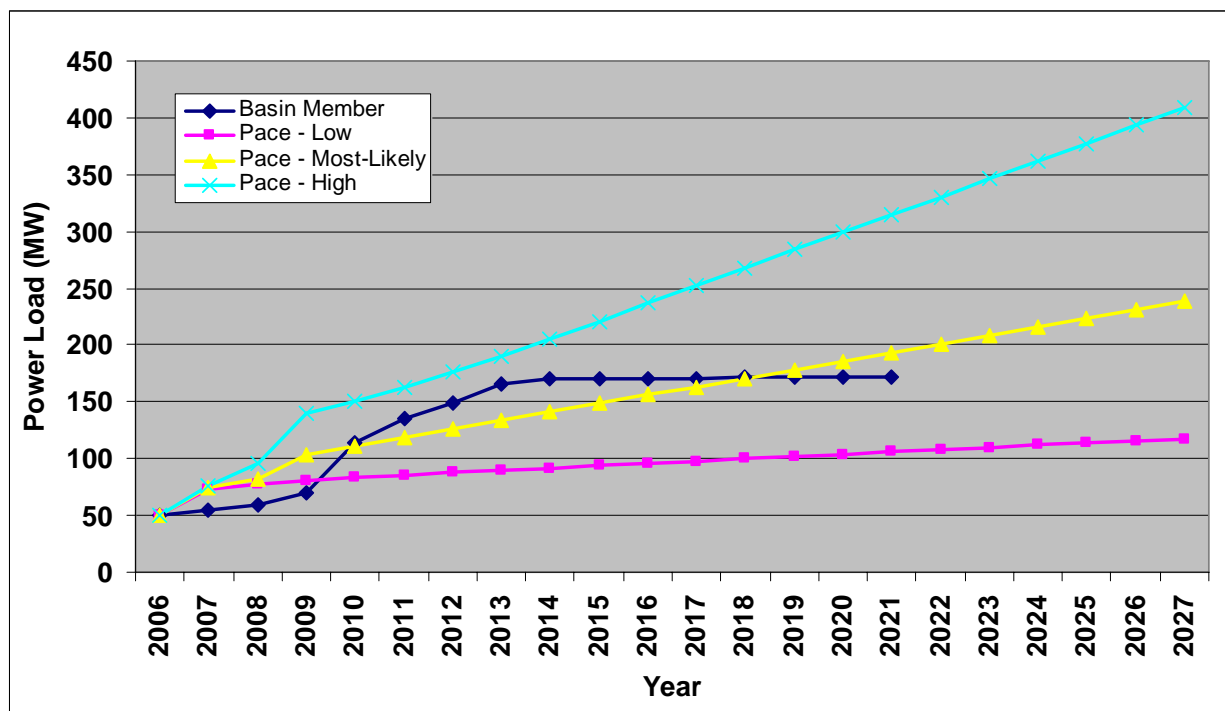
Historical power load data through 2006 was provided by Basin Electric. To forecast future power load, assumptions were made regarding a number of key factors. These factors include, but are not limited to, the following: total drilling activity, drilling activity by region, oil and water pumping requirements per well, pump load factors, EOR activity, gas processing, gas gathering and compression, and oil pipeline pumping. These key factors were assigned values and scheduled according to knowledge obtained from interviews with state oil and gas officials and industry representatives based on their current experience and best estimates of future development plans. Power load was forecasted for 20 years for each of the three regions and for each of the scenarios: Low, Most-Likely, and High.

Although the IPFM is designed to forecast the best educated estimate of future power load, there is significant risk and uncertainties associated with the pace and extent of oilfield development within the Williston Basin. Industry's development plans are fairly well defined for the next two to three years, however, beyond that the level of confidence in development projections is dramatically reduced. As such, there is considerable risk that development will proceed at a rate very different than what is currently anticipated. For example, the uncertain influence of the Bakken formation could impact the level and distribution of future drilling activity. Industry has a high level of confidence in further developing the Bakken play in the Elm Coulee Field in Region 2 and along the Nesson Anticline in Region 1. Outside of these areas, however, the potential performance of the Bakken formation is unpredictable and highly uncertain. In an environment of favorable conditions such as high sustained oil prices, discovery of successful completion technologies, new field discoveries, better than average EURs, and lower drilling and operating costs, there could be tremendous potential for future development of the Bakken play in the Williston Basin. Thus there is upside potential to the high case that has not been accounted for with the current inputs to the IPFM as it is too uncertain to speculate. If favorable conditions continue beyond the next few years, there is potential for significantly higher power load requirements. With this in mind, the IPFM was designed as a dynamic model whereby different development scenarios could be evaluated as inputs to the model change over time.

Appendix B: Regional Power Load Forecasts

This section includes the total oil related forecasted power load for each region.

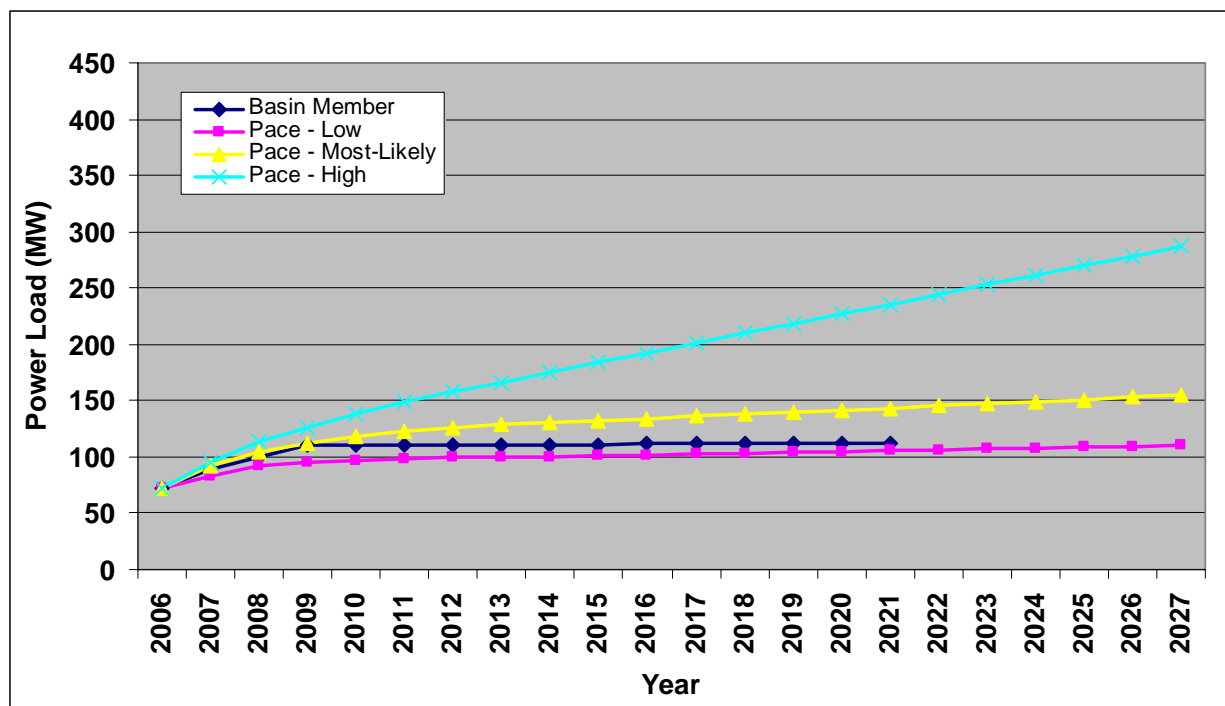
Exhibit 18: Region 1 Power Load Forecast (High, Most-Likely, Low)



Source: Pace Global.

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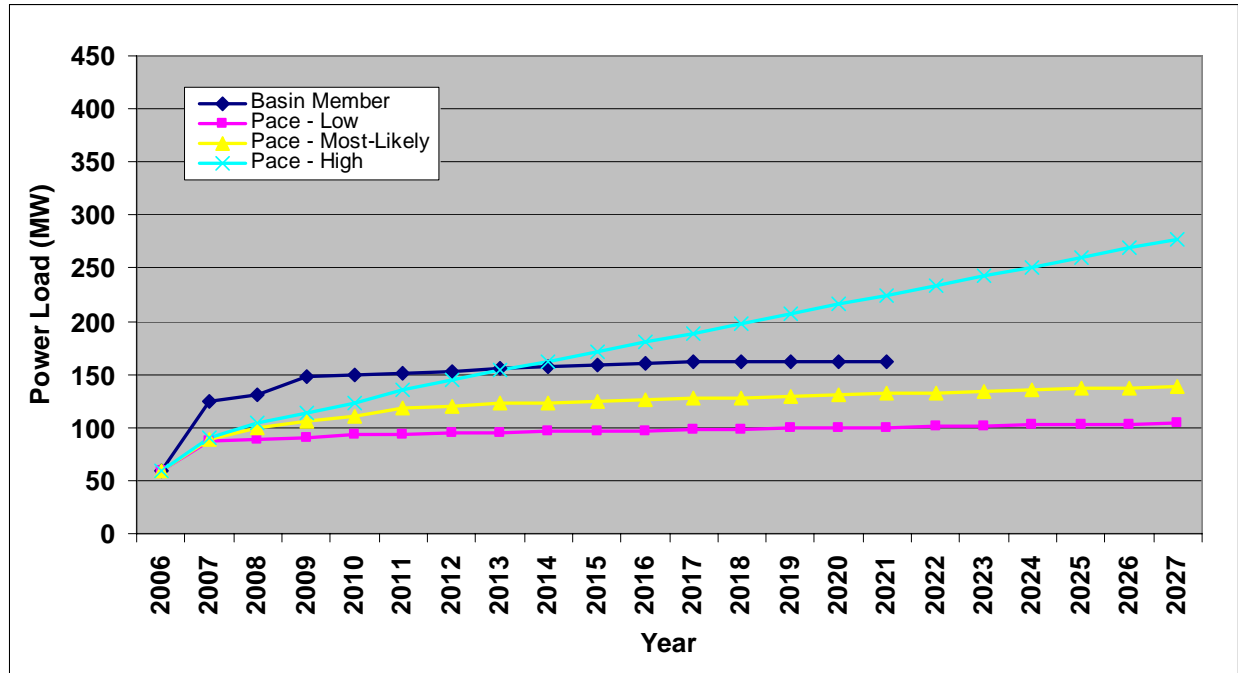
Exhibit 19: Region 2 Power Load Forecast (High, Most-Likely, Low)



Source: Pace Global.

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Exhibit 20: Region 3 Power Load Forecast (High, Most-Likely, Low)

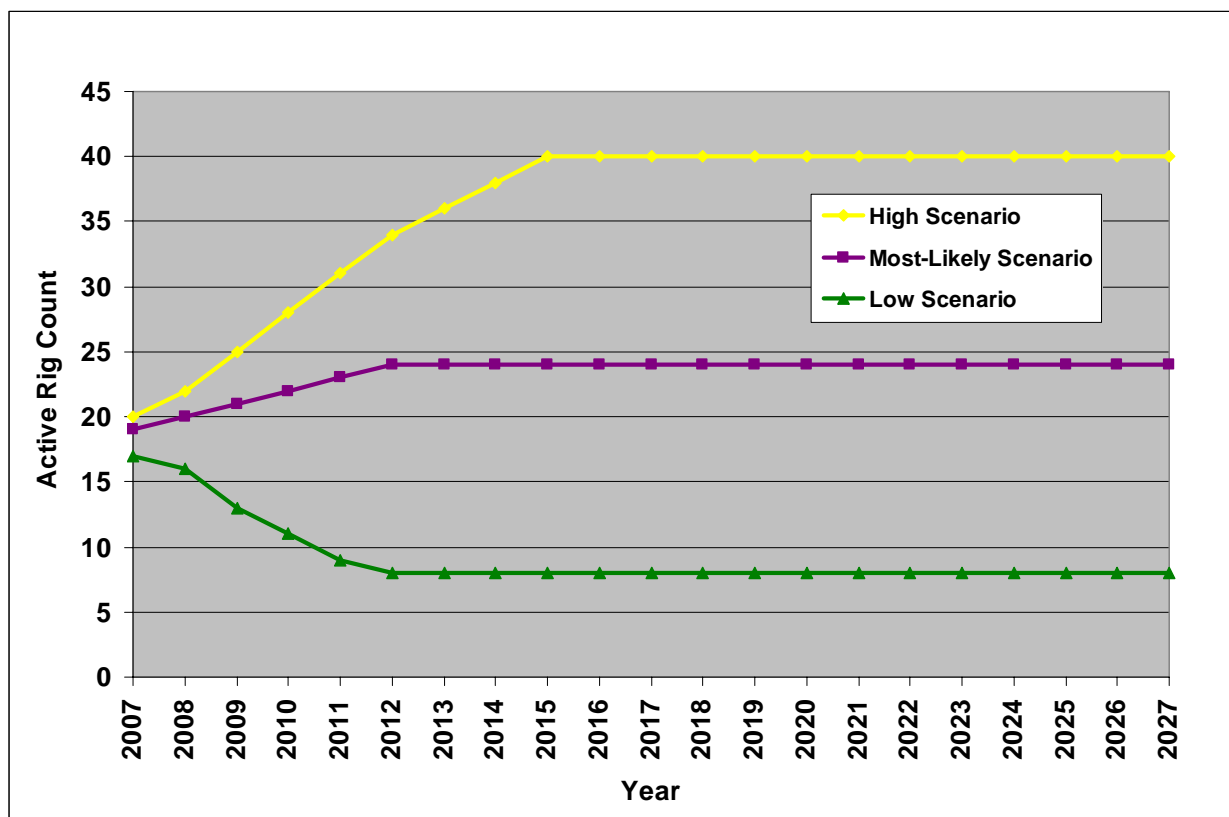


Source: Pace Global.

Appendix C: Projected Rig Count

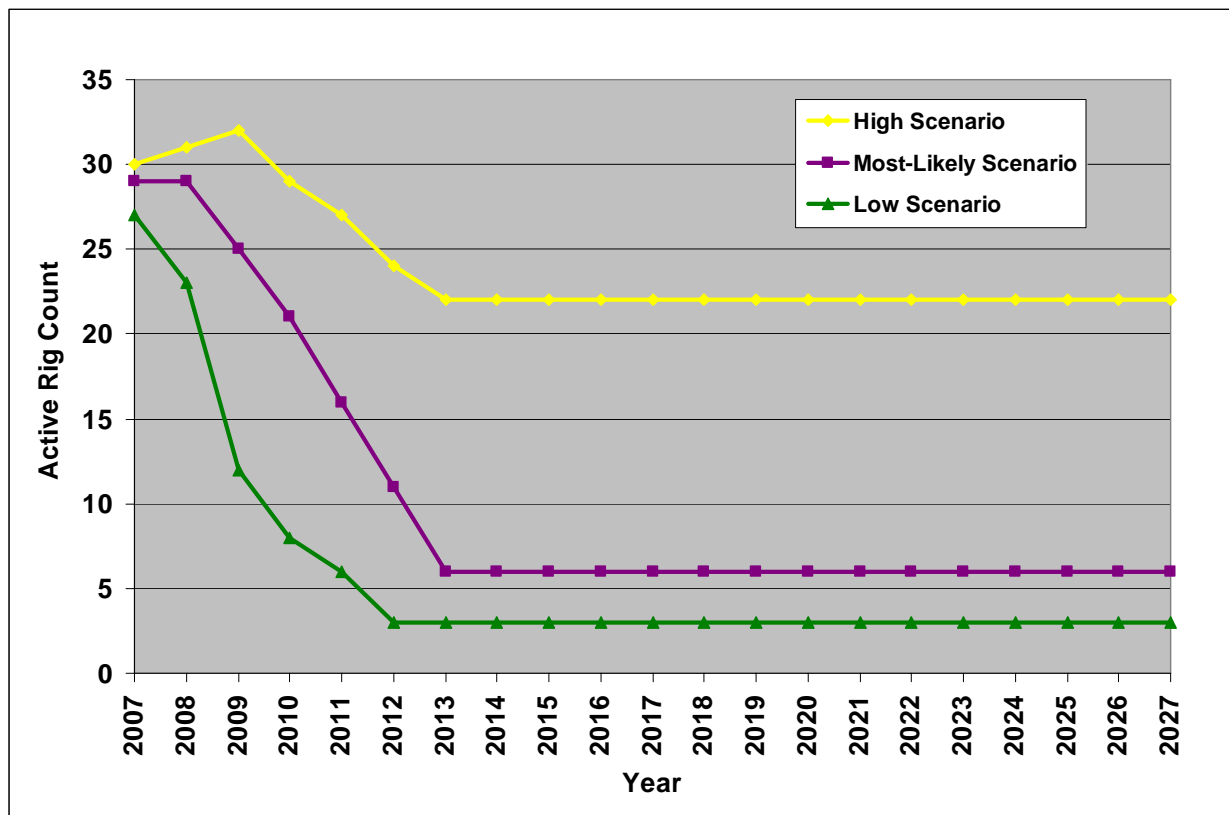
This section includes the projected rig counts for each region and for the total Williston Basin.

Exhibit 21: Region 1 Projected Rig Count (High, Most-Likely, Low)



Source: Pace Global.

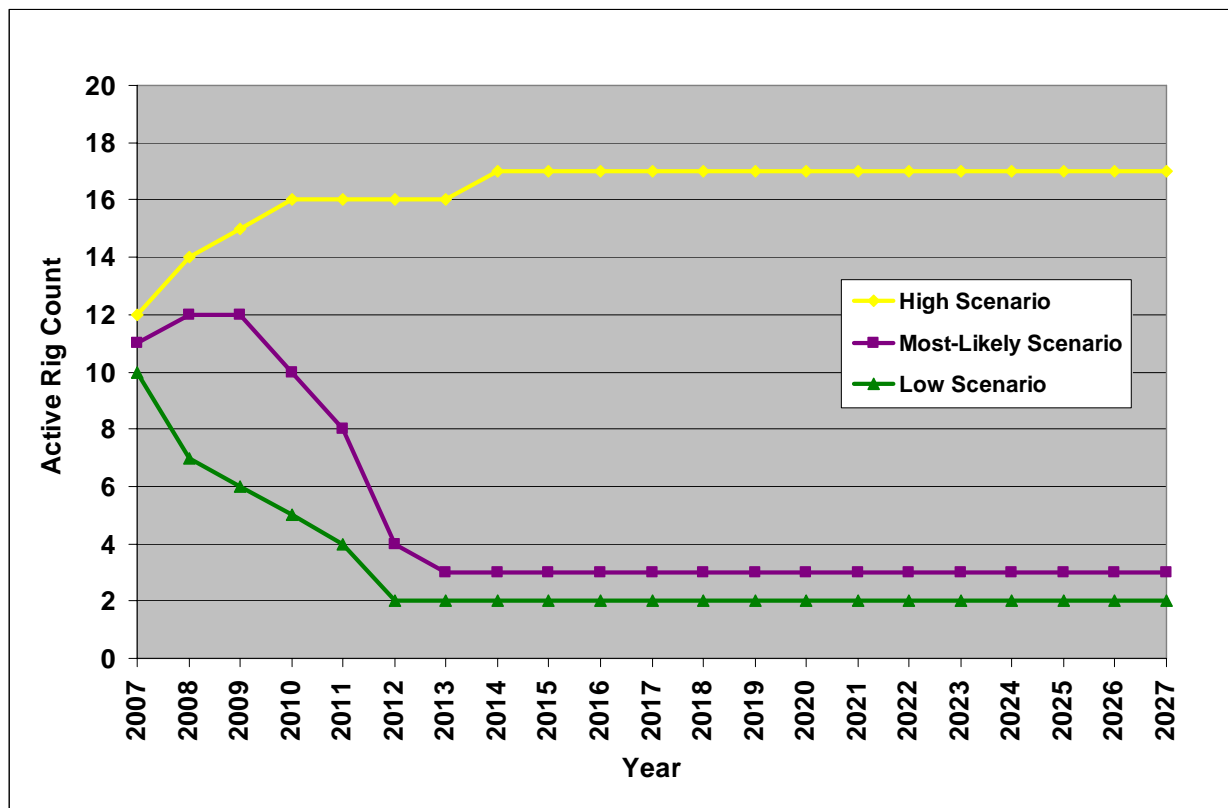
Exhibit 22: Region 2 Projected Rig Count (High, Most-Likely, Low)



Source: Pace Global.

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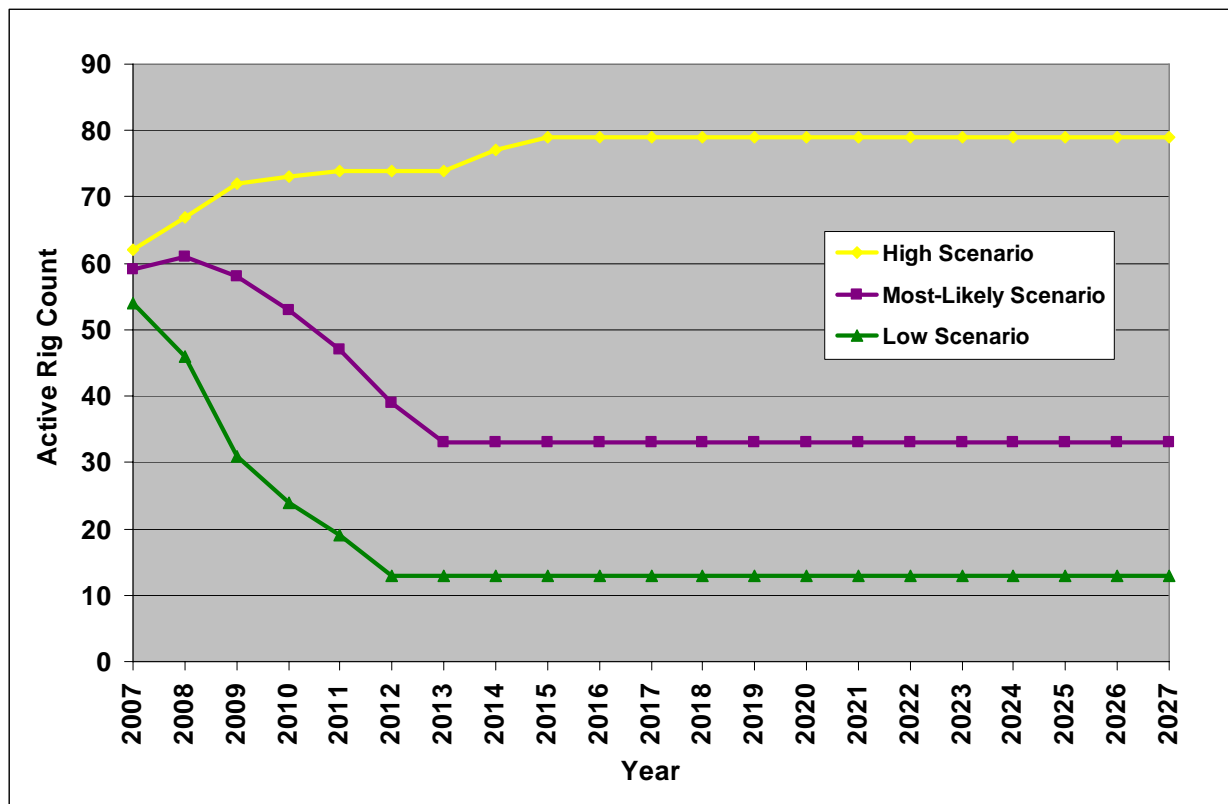
Exhibit 23: Region 3 Projected Rig Count (High, Most-Likely, Low)



Source: Pace Global.

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Exhibit 24: Total Projected Rig Count (High, Most-Likely, Low)

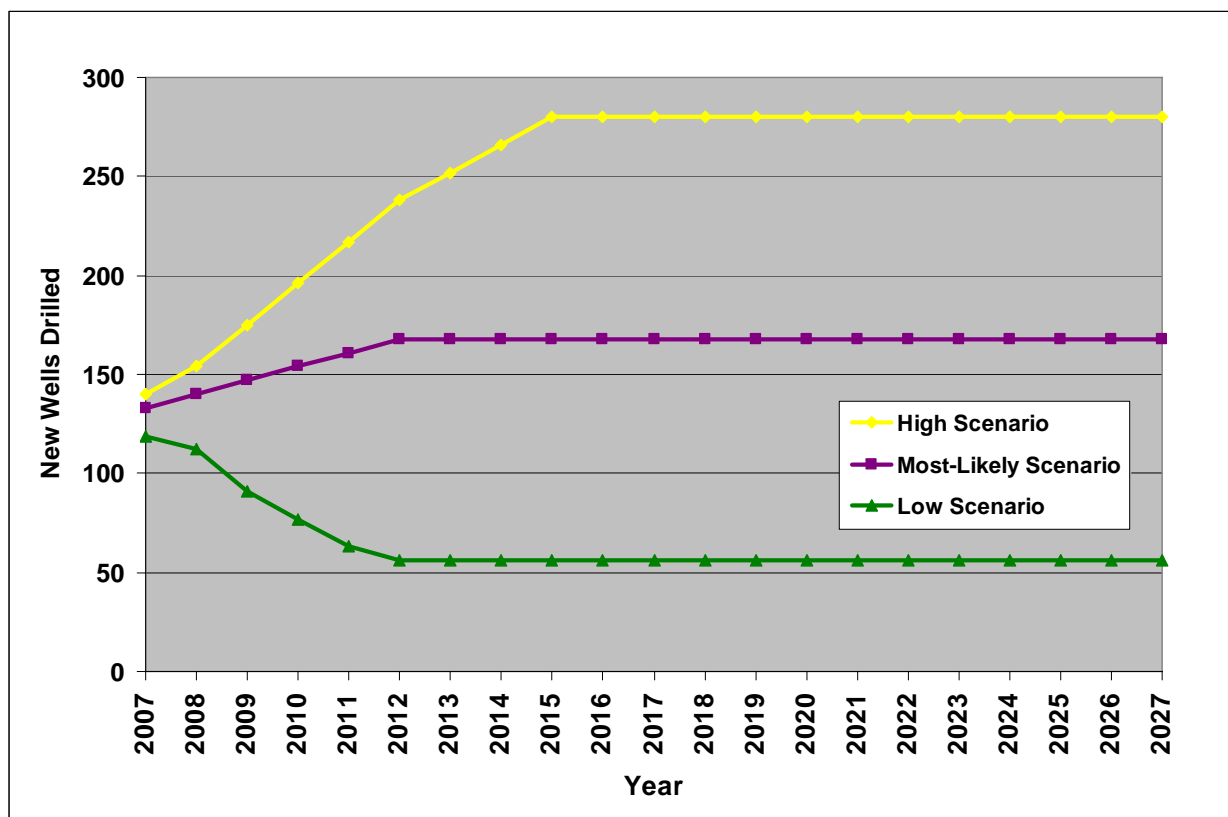


Source: Pace Global.

Appendix D: Drilling Forecasts

This section includes the drilling forecast for each region and for the total Williston Basin.

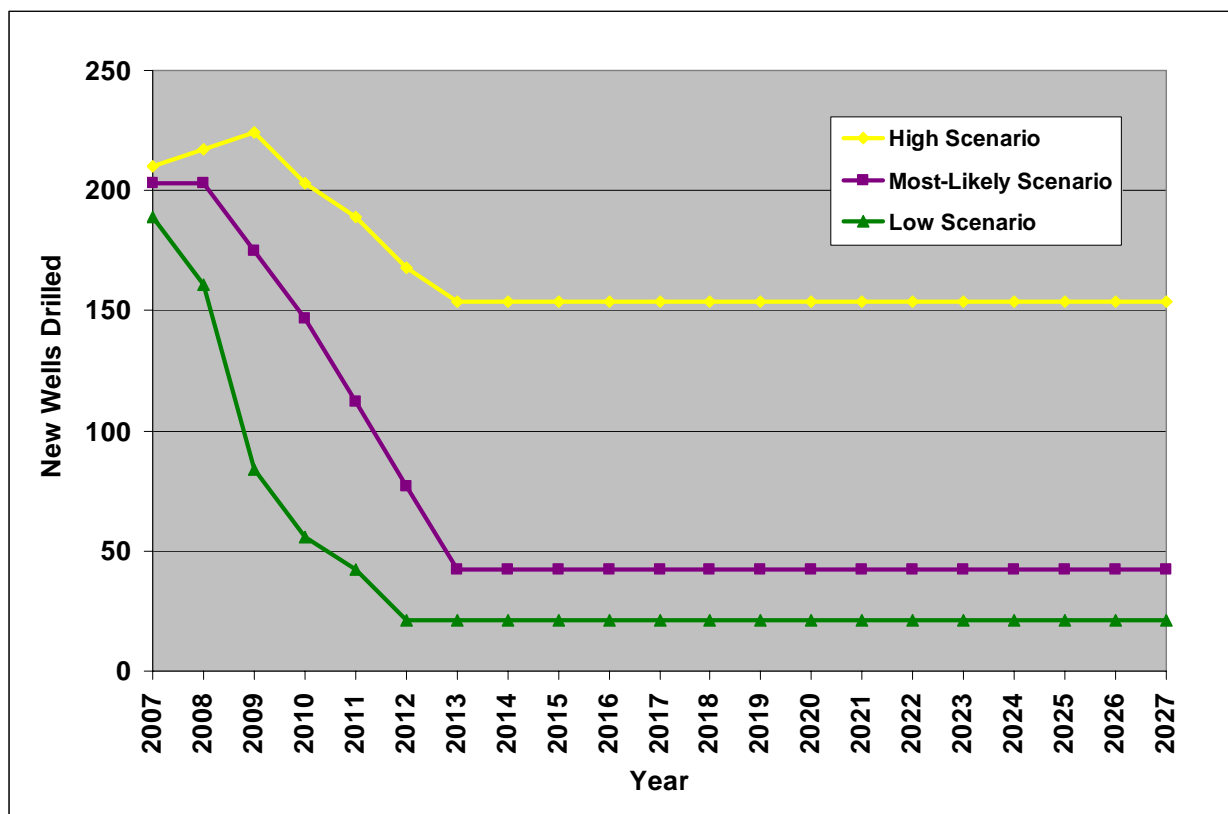
Exhibit 25: Region 1 Drilling Forecast (High, Most-Likely, Low)



Source: Pace Global.

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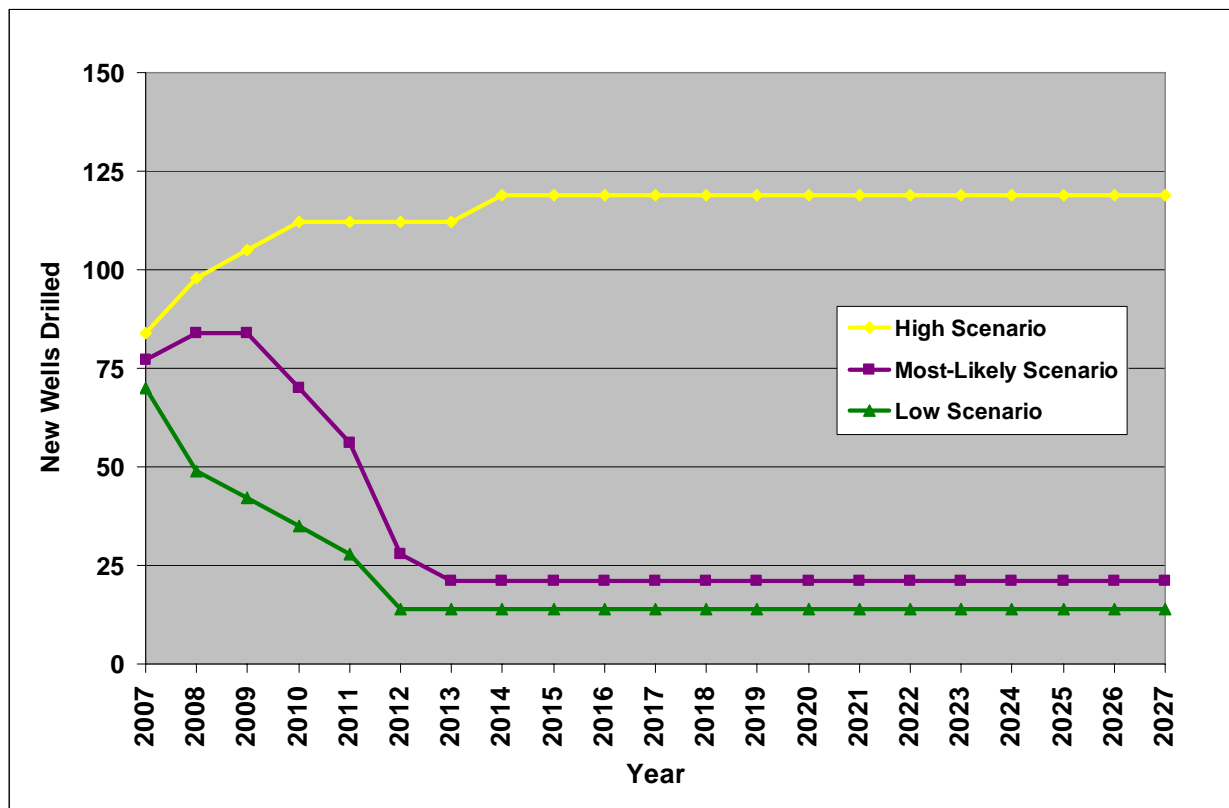
Exhibit 26: Region 2 Drilling Forecast (High, Most-Likely, Low)



Source: Pace Global.

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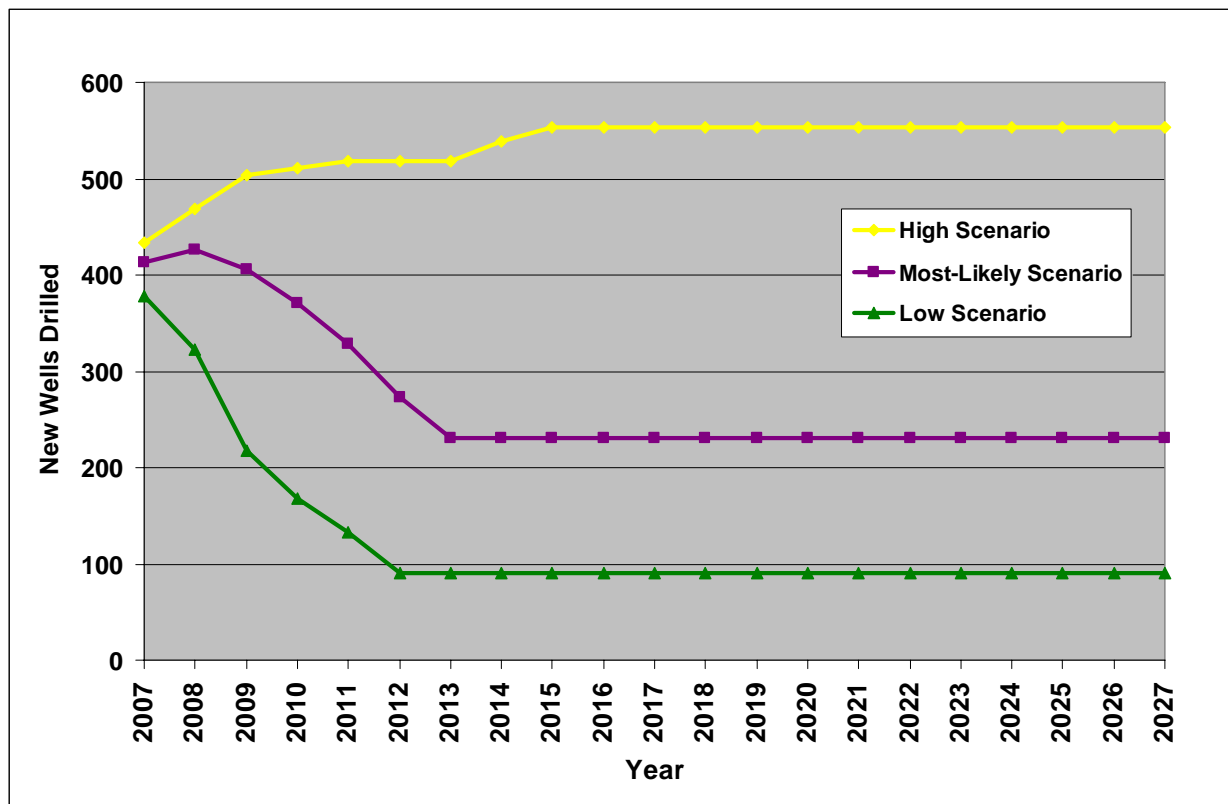
Exhibit 27: Region 3 Drilling Forecast (High, Most-Likely, Low)



Source: Pace Global.

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Exhibit 28: Total Drilling Forecast (High, Most-Likely, Low)

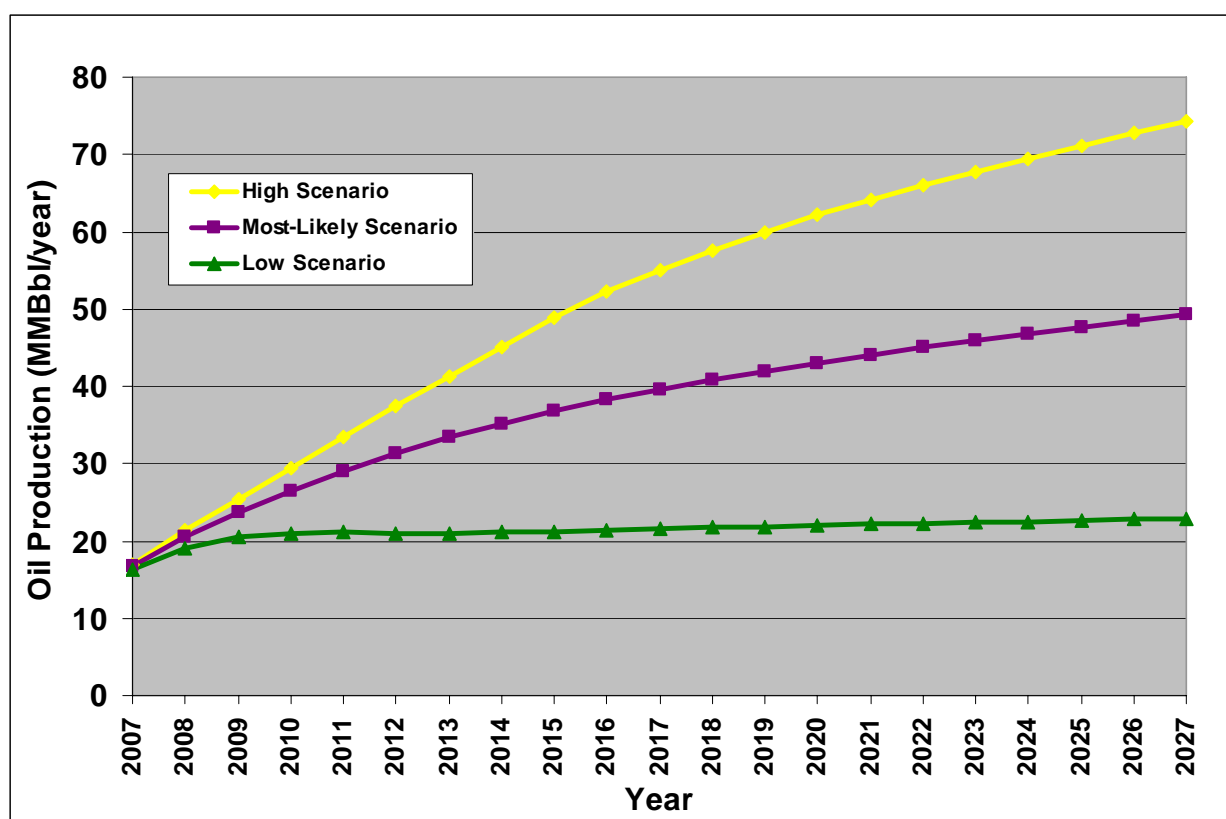


Source: Pace Global.

Appendix E: Oil Production Forecasts

This section provides the total oil production forecast, including production from both existing wells and new wells, for each region and for the entire Williston Basin.

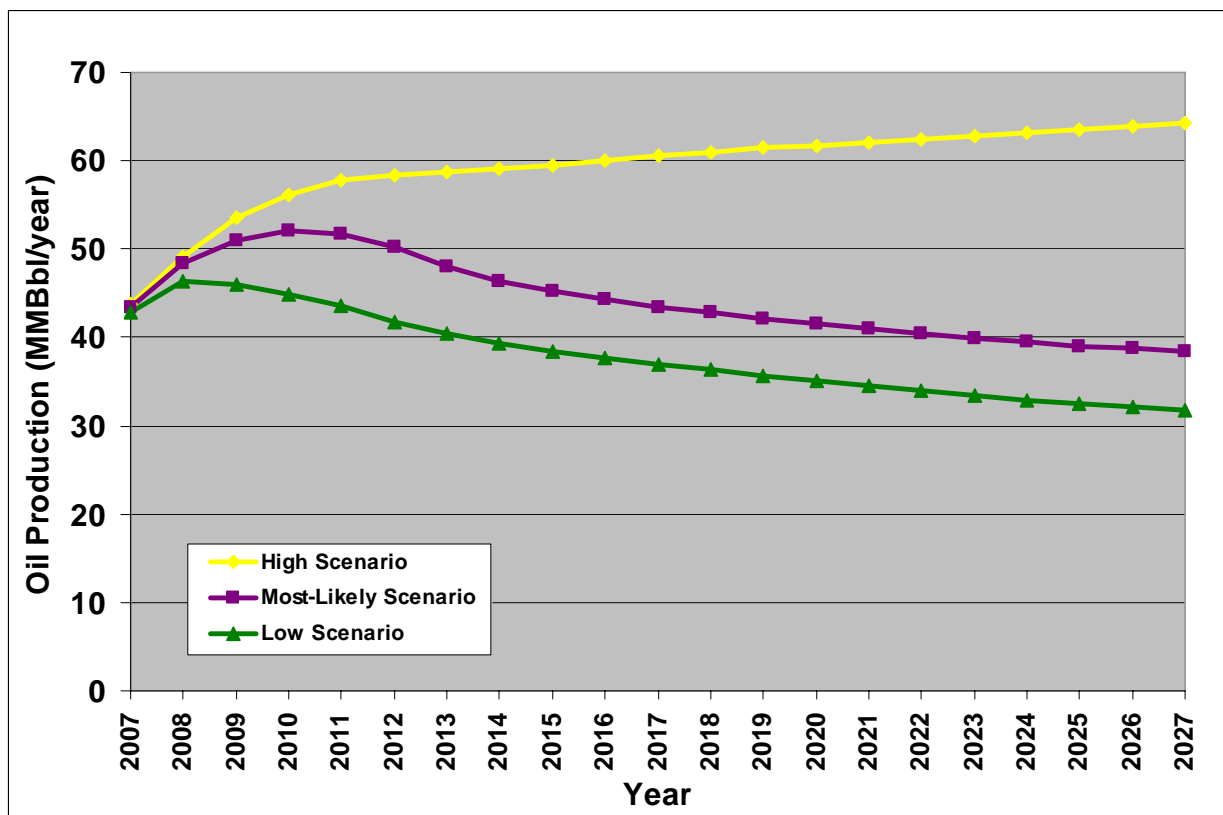
Exhibit 29: Region 1 Oil Production Forecast (High, Most-Likely, Low)



Source: Pace Global.

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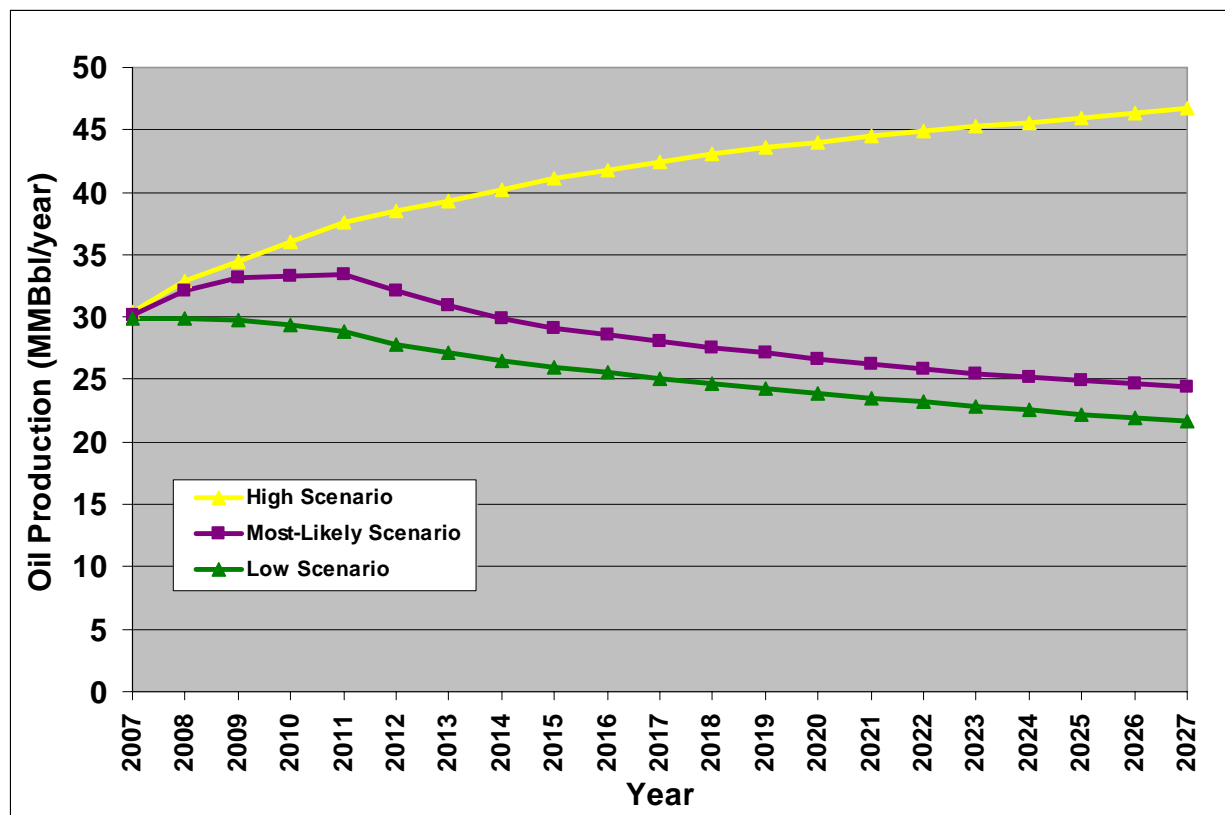
Exhibit 30: Region 2 Oil Production Forecast (High, Most-Likely, Low)



Source: Pace Global.

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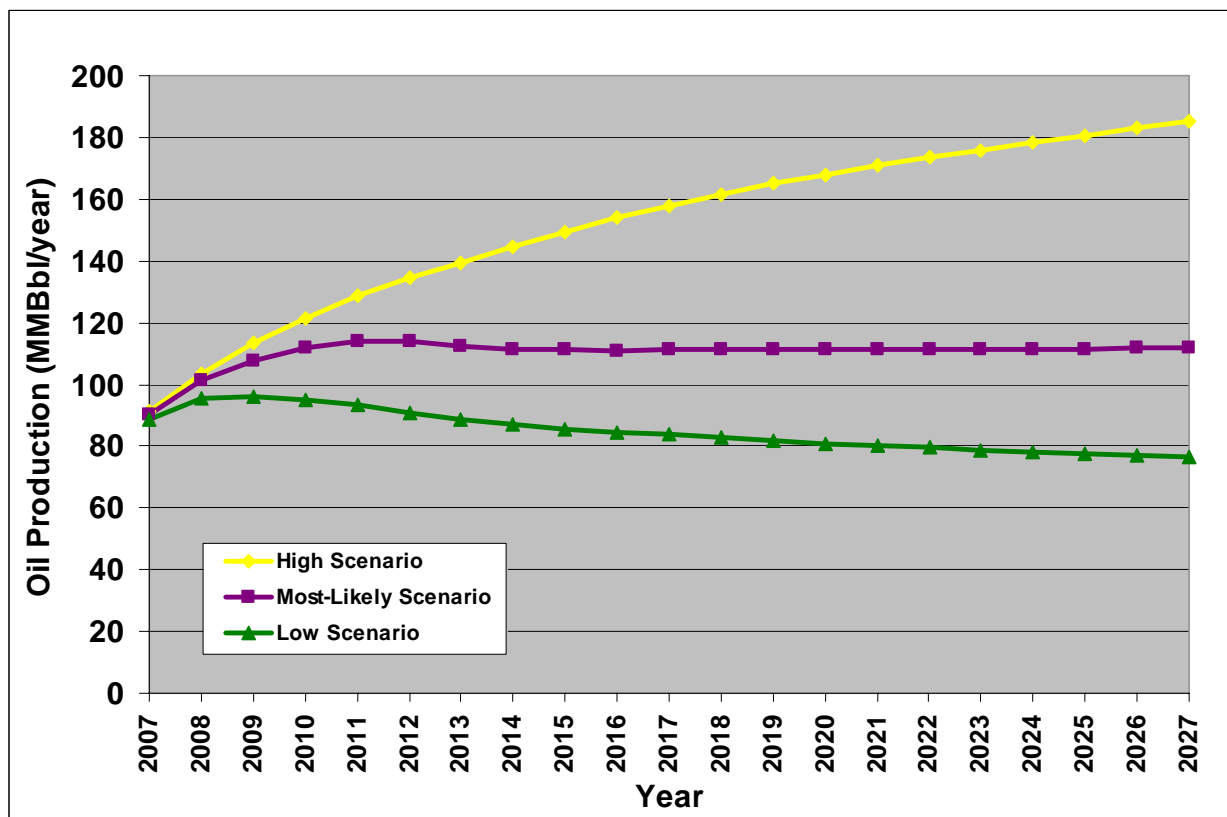
Exhibit 31: Region 3 Oil Production Forecast (High, Most-Likely, Low)



Source: Pace Global.

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Exhibit 32: Total Oil Production Forecast (High, Most-Likely, Low)



Source: Pace Global.